

# CPA Common Final Examination

**BOARD OF EXAMINERS' REPORT** 

PART A — The Day 2 and Day 3 Report

September 2020 Examination



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## **TABLE OF CONTENTS**

		<u>Page</u>
	Examiners' Report on the September 2020 Common Final Examination – and Day 3)	1
` ,	Candidates	9
<u>Appendices</u>		J
Appendix A:	Examination Design, Marking Guide Development, and Marking of the Common Final Examination	18
Appendix B:	September 9, 2020 – Day 1 Simulations	23
	Day 1 – Version 1 DHC Case Linked to Capstone 1	24
	Day 1 – Version 2 Marmani Case Linked to Capstone 1	41
Appendix C:	September 10, 2020 – Day 2 Simulation and Marking Guides	55
	Day 2 – Simulation	56
	Marking Guide – Common	96
	Marking Guide – Assurance Role	112
	Marking Guide – Finance Role	135
	Marking Guide – Performance Management Role	152
	Marking Guide – Taxation Role	172
Appendix D:	September 11, 2020 – Day 3 Simulations and Marking Guides	196
	Day 3-1 Simulation	197
	Marking Guide 3-1	203
	Day 3-2 Simulation	222
	Marking Guide 3-2	227
	Day 3-3 Simulation	246
	Marking Guide 3-3	254
Appendix E:	Results by Assessment Opportunities for Day 2 and Day 3	270
Appendix F:	Board of Examiners' Comments on Day 2 and Day 3 Simulations	276
Appendix G	CPA Common Final Examination Reference Schedule	328
CPA Regional	and Provincial Contact Information	332

See Part B for full Day 1 report on Marmani simulations and marking guides.

# THE BOARD OF EXAMINERS' REPORT ON THE SEPTEMBER 2020 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 2020 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, two vice-chairs, 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 *CPA 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. A CFE subcommittee, made up of nine members of the board, is actively involved in the preparation of the CFE simulations, the preliminary marking guides, and the setting of the initial passing profile. Selected members of that subcommittee participate in the Preliminary Evaluation Centre where the marking guides are tested against candidate responses and finalized, and in the start-up of the marking centre. The BOE chair and vice-chair provide oversight throughout the entire marking process. The full board is responsible for equating the difficulty of the examination to prior years' examinations and determining the passing standard.

#### THE CFE

#### **Preparation and Structure of the CFE**

The board staff works in conjunction with authors to ensure that simulations presented to the board achieve the overall intent and design objectives set by 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. The CFE subcommittee reviews and refines these simulations that 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' readiness to enter the profession:

**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 first time writers and by repeat writers who chose to attempt the new case rather than Version 2 of the previous Capstone case. Version 2 is written by repeat writers 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, is a four-hour paper, consisting 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, the vice-chair, selected member(s) of the CFE subcommittee 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 2020 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, Marmani 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 participate in the monitoring of 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 candidate is judged in relation to the board's pre-established expectations of an entry-level chartered professional accountant. Any changes to the initial profile that were made throughout guide-setting and the marking centre 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 (set using a scale: Easy, Easy to Average, Average, Average to Hard, or Hard)
- The level of difficulty of each Assessment Opportunity (set using a scale: Easy, Easy to Average, Average, Average to Hard, or Hard)
- 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 (i.e., those BOE members not on the CFE subcommittee and therefore not directly involved) 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.

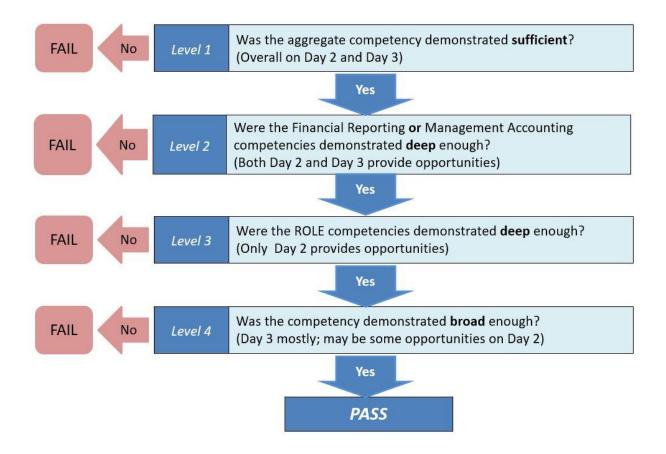
#### Day 2 and Day 3

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).

The BOE is responsible for equating the results from one examination to another to ensure that candidates have an equal chance of passing whichever examination they write. The BOE uses the factors listed above under setting the passing standard, in order to equate the examinations.

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 decile ranking is provided for failing candidates.
- 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 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.

Paul Van Bakel, CPA, CA

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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, demonstrate sufficient competence in all areas, plus meet the two depth standards and the breadth standards.

#### Introduction

The September 2020 CFE Report, Part A and Part B combined, presents detailed information on all candidates' performance for all the examination cases, except for the Day 1 linked case, DHC Version 1. The CFE Report on DHC will only be provided after Version 3 is written in September 2021<sup>1</sup>. The simulations, marking guides, marking results and Board of Examiners' (BOE) comments on the remainder of the examination are found in this document (Part A of the CFE Report). Similar information on Day 1 (Marmani Version 1 and Version 2) can be found in Part B of the CFE Report.

The intent of this message from the BOE is to help candidates improve their performance on future CFEs by drawing their attention to the most common detracting characteristics observed in candidate responses to the September 2020 CFE. The BOE's comments are based on the feedback of the marking teams, who see the entire candidate population, and reflect the broad themes noted by the markers. More detailed, AO by AO commentary on candidates' performance can be found in the BOE's comments in Appendix F of Part A, or Appendix H of Part B, of the CFE Report.

#### 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 analysis that is relevant and critical to strategic decision-making, professional judgment and ability to synthesize. Day 2 allows candidates to demonstrate their technical competence in the common Financial Reporting and Management Accounting competencies and in their chosen role, which ties to one of the four elective areas. Day 2 typically, but not always, 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. It is also time constrained, requiring candidates to prioritize their time per issue. Both Day 2 and Day 3 require candidates to integrate the information found in the case in order to demonstrate competence. All three days require candidates to clearly communicate their thought process.

<sup>&</sup>lt;sup>1</sup> Due to the cancellation of the May 2020 CFE, the profession decided to offer Version 2 of DHC on the May 2021 CFE rather than the September 2021 CFE. A Version 3 of DHC will be offerred in September 2021

#### **Strengths and Weaknesses**

#### Time management

With a few exceptions, time was well managed on the three days of the CFE. There was a normal amount of evidence of time constraint on the last AO of Day 3, Simulation 3. The BOE was pleased to see less AOs being "skipped over", as the majority of candidates attempted all the AOs.

Neither Day 1 Version 1 or Version 2 was meant to be time constrained in any way, and most candidates managed their time well. In particular, the amount of time devoted to their situational analysis was better balanced with the rest of their response. Whereas previously the BOE often noted that candidates spent too much time preparing a full situational analysis, responses were focused more on the relevant changes from Capstone. Those who did experience time management issues on Day 1 generally spent too much time on their quantitative analyses, aiming to perform more complex calculations than were required. For example, on DHC Version 1, candidates often tried to recalculate Holiday's income figures. On Marmani Version 2, some candidates spent too much time analyzing the financing alternatives, which was the first issue to appear in Version 2 this year. Most candidates addressed the issues in the order in which they appeared in the case, and while candidates are free to address the requireds in the order they prefer, the financing alternatives happened to be the issue of least strategic consequence. These candidates tended to spend their time analyzing the operational aspects of refinancing Ray's loan compared to converting his debt to equity in Marmani. For those candidates who did not take the time to rank the issues, this resulted in their having insufficient time to fully address the more important strategic issues.

On Day 2, the teams noted fewer rushed, or very short, responses in the role section as compared to the prior year. In 2019, the BOE noted that candidates spent an inordinate amount of time on the common AOs in Day 2, to the detriment of the role AOs. This was likely due partly to candidates spending excessive time on the quantitative Management Accounting AOs, failing to balance and manage their time per AO properly. Candidates appear to have better managed their time per AO, with many candidates appearing to have set a time limit for addressing the six common AOs. This was evidenced by some candidates stopping their discussion partway through AO#6 (convertible debt) in order to move on to the role AOs. There also appeared to be a good balance between the amount of time spent on the quantitative and qualitative elements of the common AOs.

Because success on the depth-in-role test is only achievable on Day 2, it is important to manage the amount of time spent on the common AOs, to ensure that enough time remains to be able to address the role AOs in sufficient depth. Candidates are encouraged to continue to balance the time spent on the common AOs and the role AOs, and on each individual AO, as spending too much time on any one AO can hurt performance on another AO.

#### Clarity of communication / Unsupported discussions

The BOE noted an overall improvement in the clarity of communication, with fewer very short, point form and generic responses that are hard to interpret. However, some candidates continue to list case facts without elaborating on why those points were relevant, or explaining the relationship to the point being argued. For example: on Day 2, Common, AO#2 (Airport bid qual), candidates listed several potential benefits and risks of the airport contract but did not explain the specific impact of each point to ECI; on Day 2, Assurance role, AO#8 (Audit plan critique), some candidates listed risk factors without explaining how they would impact the overall financial statement risk; on Day 2, Finance role, AO#10 (Ride-sharing - qual), candidates provided a list of case facts without explaining why these were advantages or disadvantages of either option; on Day 2, Taxation role, AO#12 (Employee benefits), candidates often provided a table or list of the different benefits, stating very briefly whether they were taxable or deductible without explaining why; on Day 2, Performance Management role, AO#12 (Drivers' compensation), candidates often listed case facts with no explanation of why these were advantages or disadvantages of either option; and on Day 3, Simulation 3, AO#3 (Growth options - qual), candidates listed pros and cons of each option without linking them to the company's goals and values. For additional examples of where added support made the difference in the quality of the response, see the BOE's detailed comments.

In the past, the BOE noted instances where candidates copied information from the Handbook but did not apply that information to the case facts. This year, what appeared to be more prevalent was candidates listing requirements or criteria, typically Handbook or Income Tax Act guidance, and labelling them "met" or "not met," without providing an explanation to support why. Candidates are reminded that the role of the CPA is to advise clients on the application of standards and other requirements. Without that explanation, it is impossible to know what logic was applied, and therefore, the BOE is unable to assess the degree of competence. This pattern was noted on several of the financial reporting AOs, including Day 2, Common, AO#5 (Lease), and on Day 3, Simulation 2, AO#6 (SwiftPay accounting treatment). It was also evident on Day 2, Performance Management role, AO#9 (Fit of ECI's strategy with Policy), in the second part of the required, where some candidates mentioned the government's criteria and then labelled each one as being "met" or "not met," with no support for this assessment. A similar approach was taken on Day 2, Taxation role, AO#13 (QSBC shares), where candidates copied and pasted the relevant section from the Income Tax Act, and then concluded that the criteria were met without explaining why.

Candidates are reminded of the importance of answering the questions, "Why?" or "So what?" when making any point using case facts, and including that in their response. Repeating case facts without further explanation, even if it is in a logical format, such as a list of pros and cons, is insufficient. Additionally, stating whether the requirements or criteria are met without explaining why is also not enough. The BOE is interested in understanding a candidate's logic, and is looking for evidence of the analysis and professional judgment that has been applied in reaching a conclusion. For the Financial Reporting AOs in particular, the BOE is interested in seeing the application of the accounting principles as evidence of a candidate's understanding of the decision-making elements that were considered. There is more value in a discussion of the fundamental, underlying accounting principles, and how they apply, than with a "cut and paste" of the Handbook that has no supporting explanation. Candidates are reminded that the Handbook is only a resource tool, to be used to help explain their position.

#### Combining technical knowledge and enabling skills

As has been the pattern for the past few years, candidates generally performed better on the more straightforward and routine issues presented throughout Day 2 and Day 3 of the CFE. For example, they performed well on Day 2, Common AO#5 (Lease), Day 3, Simulation 2, AO#1 (Recoverable cost allocation), Day 3, Simulation 3, AO#1 (Ratio analysis), and on Day 3, Simulation 1, AO#6 (Control weaknesses). It was also noted that, within some of the AOs, candidates correctly addressed the easier elements. However, the more unusual and harder issues presented a challenge for many, with some candidates avoiding those entirely.

The BOE consciously includes more challenging and unique topics (such as convertible debt in the Common AOs, stock compensation plans or the reliance on the QC team in the Assurance role, the point of indifference between the two business models in the Performance Management role, the conversion value of the Class B shares in the Finance role, and the QSBC share discussion in the Taxation role) in order for candidates to use the tools available to them to find the applicable technical knowledge, demonstrate their ability to draw on first principles and use their judgment to work through an issue they perhaps have never seen before. Although there is no doubt that success on the CFE requires demonstrating strong foundational knowledge, the ability to handle new and difficult issues is also critical. With technical knowledge changing at an ever increasing pace, it is important that candidates know how to look up relevant standards, draw on first principles, explore alternatives and use their professional judgment and common sense to tackle the issues presented. The BOE will continue to present new and challenging topics on the CFE, and encourages candidates to use their enabling skill set to respond to the issues.

In addition to the above-noted areas not being as well performed, the BOE noted that candidates had difficulty with many of the Management Accounting AOs that required relevant costing or incremental costing to be applied as a technique. Many lost sight of which basis they were using and ended up comparing figures that were calculated on different bases. For example, on Day 2, Common, AO#1 (Bid price - quant), candidates often mixed their calculations of ECI's existing costs, which were on a per-kilometre basis, with their calculations of the airport contract costs, which were on a per-trip basis, adding these together to determine their bid price. As a result, their conclusions often became unreasonable, such as recommending a minimum bid price in the millions of dollars, or pennies per trip. On Day 2, Performance Management role, AO#7 (Indifference point between two business models), many candidates were internally inconsistent in their calculation, calculating some costs on a per-month basis, some on a per-car basis and others on an annual basis. Also on Day 2, Performance Management role, AO#11 (Maintenance options), some candidates made conceptual mistakes in the calculation of the annual cost of the in-house option, such as adding recurring costs to one-time costs, ignoring the initial one-time costs altogether or including irrelevant or sunk costs in their analysis. On Day 3, Simulation 3, AO#2 (growth options - quant), many performed an incremental analysis for the permanent location and wrongly compared it to what the net income would be for the Gogo booth option, without any adjustments for lost revenue or incremental savings. Others included both incremental components and net income components within their analysis of one option, resulting in their individual calculation not being internally consistent.

In terms of the more straightforward AOs noted above, there were some surprising technical weaknesses. On Day 2, Common, AO#5 (Lease), a number of candidates thought there was a bargain purchase option, even though the case stated that \$5,000 was the estimated fair value at the time, and a number of candidates had errors in their present value calculations, such as using an incorrect number of periods or an inappropriate interest rate. Many candidates did not integrate information from ECI's draft financial statements in Appendix I, which would have allowed them to approximate the useful life of the leased assets; as a result, they concluded that there was not enough information to be able to assess the Handbook criteria regarding the lease term. On Day 3, Simulation 2, AO#6 (SwiftPay accounting treatment), a significant number of candidates failed to identify that there were different components that required different accounting treatments, even though the amounts were laid out separately in the case (\$65,000 for tablets, \$75,000 for software licence and \$5,000 for testing/software tailoring). These candidates often treated all components of SwiftPay as one asset, usually as PP&E.

Finally, the BOE noted that candidates' ability to perform an NPV and WACC has improved (see Finance BOE comments). However, it was also noted that candidates sometimes attempted to apply this technique where it was inappropriate to do so. For example, in Day 1, Version 2, which was intended to focus on the contribution margins, many candidates attempted to calculate the net present value of the contribution margin, and then concluded that the project was positive and should be pursued. These candidates failed to consider many of the costs that were relevant, and therefore, their conclusion was based on false information. On Day 3, Simulation 1, AO#4 (Cash flow projection), some candidates used a net present value calculation to conclude on whether the project was profitable. This type of analysis did not address the client's request, as they could not answer whether the franchising operations would require additional funding.

#### Misinterpretation of the required / Irrelevant or unrelated discussions

Similar to past exams, there were instances of candidates providing irrelevant discussions, either as a result of misinterpreting or misreading the requireds or as a result of failing to consider the specific case facts presented in an integrative manner. This issue may have been somewhat more prevalent this year, due to the exam being slightly less directive, and the level of integration required for some issues being slightly higher.

The BOE believes it is an essential CPA skill to be able to analyze and integrate the information presented in order to identify what is, and isn't, relevant to the issues raised in the case. The BOE intentionally reduced the level of direction on some of the issues, and placed certain case facts in different places, to increase the required integration. This may have resulted in some candidates having more difficulty identifying the correct issue and relevant case facts to include in their discussions. Candidates are reminded to take the time necessary to read the required carefully, and to use their judgment to decide whether a discussion is pertinent to the issues at hand or to their role.

Following are some examples of where candidates misinterpreted the requireds or failed to integrate information that was presented in different parts of the case.

On Day 2, Common, AO#3 (Licence impairment), there were two instances where candidates failed to integrate the information presented. First, many candidates were aware that ASPE requires a cash flow test for recoverability and often suggested doing one. However, although most of the information the candidates used for this AO was presented in Appendix II (Common), the information needed to perform the recoverability test was found in Appendix IV (Common), which many candidates failed to integrate. Second, some included lengthy discussions on whether the licences were an intangible asset, apparently thinking they were addressing the required, since they were discussing the stated required, "the accounting treatment for the licences." However, additional key information was presented in Appendix II (Common), where Jen specifically wonders whether ECI's licences are impaired due to changing market conditions. Integrating this information into the required would have pointed candidates to the right discussion, that is, whether there was impairment.

On Day 2, Performance Management role, AO#7 (Indifference point between two models – quant), a large number of candidates misinterpreted the required and thought they needed to calculate the number of trips that Ruby would need to make under the ECI business model in order to have the same net income that it currently generates (\$250,000 for a two-month period), rather than the number of trips it would require in order to earn the same net income if it kept its current business model. Some misread the required, and did the calculation for the wrong company, and calculated the number of rides ECI (instead of Ruby) would have to generate to have the same net income as Ruby does currently. Others calculated Ruby's breakeven number of trips using the ECI business model, without incorporating a profit component in the calculation.

On Day 2, Finance role, AO#10 (Ride-sharing – qual), some candidates misinterpreted the required, which was to provide a qualitative assessment of both Ryde Green and EcoCab, and instead discussed whether ECI should pursue ride sharing in general. On Day 2, Taxation role, AO#13 (QSBC), some candidates seem to have misread the required, which stated, "ECI's shares might no longer qualify as qualified small business corporation shares," and thought that ECI's shares *would* no longer qualify. Instead of explaining why the shares would or would not qualify, these candidates instead tried to remedy the situation, often providing inappropriate tax planning measures as a result.

On Day 3, Simulation 1, AO#4 (Cash flow projections), some candidates lost sight of the required after performing their calculation of the royalties, and did not integrate that calculation with the other financial information in order to answer the client's question about whether additional funding was required. On Day 3, Simulation 1, AO#3 (Variance analysis), some candidates limited their use of the information to what was provided within the notes of the draft income statement, rather than integrating the relevant information found throughout the case in order to analyze the variances between budget and actuals. On Simulation 3, AO#2 (Growth options – quant), many candidates included the cost of goods sold in their calculation of the Gogo option, since the gross margin percentage was provided in the appendix with all of the other information on Gogo, but did not take into account the cost of goods sold in the permanent location option, as that information was not provided directly in the permanent location appendix, failing to integrate the information from the various appendices.

The BOE also noted on Day 2 and Day 3 that, as was the case in 2019, some candidates tried to insert discussions that were not relevant to the case. Many of these discussions appeared to come from previous CFEs, suggesting that candidates are trying to fit the answers from practice exams into the current year's exam. On Day 2, Assurance role, some candidates discussed performing audit procedures to test whether ECI was a going concern, which was an issue on the 2019 CFE. While ECI has been operating at a loss, it has a healthy current ratio and cash available in the current year, and Jen and the silent angel investors are willing to inject more funds if required. On Day 2, Taxation role, some candidates discussed intercorporate loss planning, which was an issue on the 2019 CFE. On Day 2, Performance Management role, some candidates performed a full situational (SWOT) analysis at the beginning of their response, as was required on the 2018 CFE.

A contributing factor this year seems to be the use of a certain approach being applied by some candidates. For some issues, even though it was clear from the case facts that certain aspects were not relevant, candidates seemed to feel it necessary to discuss every aspect of a topic in an effort to cover all their bases, thereby spending unnecessary time on these discussions. For example, on Day 2, Common, AO#4 (Investment in Ruby), candidates often discussed whether Ruby was a business acquisition. However, the case clearly identified that Ruby's shares were acquired 100% by ECI; therefore, the focus of the discussion should have been on the options for accounting for the acquisition (cost, equity, consolidation) and not on whether Ruby was acquired. This also occurred on the Day 2, Common, AO#3 (Impairment licences), where some candidates included a lengthy discussion of whether the licences were an intangible asset. Similarly, on Day 2, Taxation role AO#11 (Drivers become employees), some candidates spent time applying the tests for determining whether the drivers would be employees or contractors, even though the case very explicitly stated that they would be employees. On Day 3, Simulation 2, AO#1 (Recoverable costs allocation), some candidates described the ABC allocation method at length before performing the allocation, when the added value was in explaining why it was a better method to use in this case.

Another template that is seen often, and was again sometimes misused on the 2020 CFE, is the weakness-implication-recommendation (WIR) template. For example, on Day 2, Assurance role, AO#11 (Royalty controls), the required was to discuss how the Ruby drivers may be avoiding paying the full amount of royalties owed, and to recommend internal controls that should be in place. While this required has many similarities to other internal control weakness AOs that have appeared in past CFEs, where the WIR template would apply, the specific required for this case was discussing the "how," and providing recommendations. By using a WIR format, many candidates instead stated that the implication of the weaknesses they identified was that Ruby would not receive the full amount of royalties, and did not go beyond this, which provided limited value and often caused candidates to not discuss the "how" portion of the required in sufficient depth. In addition, on Day 2, Assurance role, AO#13 (Reliance on QC team), the use of the WIR template resulted in candidates discussing the weaknesses found in the team and their processes, the implications of those weaknesses and recommendations to address them, but this approach did not address a significant part of the required, which was to determine whether

external auditors could rely on the work of the QC team. And on Day 2, Performance Management role, AO#10 (EEEV's proposal), some candidates presented their response in a WIR format, which was not the best approach, given the required. Making recommendations for each clause of the proposal was not appropriate in this context, as the client simply wanted an opinion on the governance implications of the proposal, not suggested modifications to it. Also on Day 2, Performance Management role, AO#11 (Maintenance options), the use of the WIR template proved again to be detrimental to the quality of the qualitative responses of some weaker candidates, who made recommendations within each option on how to improve current operations, even though the options had not yet been implemented.

While it is good to practice writing cases, and to know different approaches to use, candidates are advised to not automatically assume the task is the same as in previous years, even though the wording may appear similar. The facts presented are unique to each case and require integration of the pertinent case facts, to fully understand what the relevant issues are for a particular case, and to decide what form of analysis is appropriate. Rarely is an issue identical. Candidates are encouraged to pause and take the time necessary to ensure that they have clearly identified what is most relevant, based on the particular set of circumstances presented, before beginning their response.

For more detailed commentary, see Appendix F of Part A, or Appendix H of Part B, of the CFE Report.

### Additional Comments Specific to Day 1 DHC (Version 1)

A majority of candidates dedicated the first section of their response to a relevant situational analysis. Most used that analysis later in their response, making relevant links back to the company's situational analysis when analyzing the specific strategic issues that were presented, and within their conclusions. Candidates generally identified the major changes from Capstone and identified the fact that DHC had limited financial resources to invest. They also highlighted DHC's primary objectives, that of concentrating on the company's core hotel business, improving the occupancy and average daily rate, earning a minimum of 12% on any strategic investments made and having an adequate level of cash in order to once again pay dividends. A few candidates chose not to provide a situational analysis and proceeded directly to their issue analysis. As a result, some missed key elements of the situational analysis within their discussion of the issues.

There were four major issues to analyze from a strategic perspective: 1) whether to purchase 100% of Holiday Tours or to split ownership 40/60% with KGI; 2) whether to convert the Northern Ontario hotel to a Global franchise; 3) whether to offer cooking retreats in Northern Ontario with Chef Norman; and 4) whether to proceed with the revised management contract in connection with HHH's proposed conference centre. In addition, candidates were expected to identify a potential conflict of interest between Patrick, Derek and KGI.

Most candidates did a good job of analyzing the major issues. There were three main differentiating factors that separated strong responses from weak responses. First, strong responses tended to recognize the more important decision factors for each of the issues and focused their discussion on the strategic implications of those factors. Important decision factors included: the possible conflict between Derek and KGI in conjunction with the decision to purchase some or all of Holiday in Issue 1; the significant change in business structure that would result if Northern Ontario became a Global franchise in Issue 2; the role and dependence on Chef Norman in Issue 3; and Martha's lack of cooperation in Issue 4. Second, strong candidates clearly explained the implications of the relevant case facts within their analysis, appropriately linking to their situational analysis. Third, strong candidates provided calculations that were clear and on point, avoiding overly complicated and unnecessary calculations. This was important, given that, when compared to some prior Day 1 cases, few calculations were required for DHC Version 1. The required calculations on DHC Version 1 were quite simple, and the main quantitative skill being assessed was the candidate's ability to critique the calculations provided.

Most candidates approached their response in a coherent and organized fashion. Only a few candidates struggled to effectively communicate their ideas. These candidates tended to use poor sentence structure, confusing syntax and an unorganized approach to their response.

For comments on Marmani Version 1 and Version 2, see Part B of the CFE report.

## **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 is worked 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 target a "board room and senior management" level of discussion, with high-level analytics. There are two versions of the Day 1 case. Candidates pre-select the version they will write.

Day 2 is one four-hour case that candidates are given five hours in which 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 two 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 at the Preliminary Evaluation Centre.

#### The September 2020 CFE Marking Centre

The 2020 CFE Evaluation Centre was 100% remote due to Covid-19. From the marker applications received, approximately 280 individuals were chosen to participate in the September 2020 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.

The Day 1 Version 1 linked case was marked by a team of 30 people from October 8 to October 20, 2020. The Day 1 Version 2 linked case was marked by a five-member team from September 18 to October 1, 2020.

The Day 2 Common assessment opportunities were marked by a separate team from the role teams. Day 2 Common was marked by a team of 60 people from October 5 to 18, 2020. Day 2 Assurance was marked by a team of 54 people from October 19, 2020. Day 2 Performance Management was marked by a team of 19 people from October 6 to October 19, 2020. Day 2 Finance was marked by a team of 8 people from October 10 to October 19, 2020. Day 2 Tax was marked by a team of 7 people from September 26 to October 5, 2020. All three Day 3 cases were marked from October 9 to October 26, 2020. The Day 3 simulations were marked by a total of 94 people.

In advance of the marking centre, the members of the CFE subcommittee, staff, leaders, and assistant leaders participate in a five or six-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, taking into account the comments on the marking guides received from provincial reviewers.

At the beginning of the marking centre, the leaders and assistant leaders presented the marking guides to their teams, while staff, the BOE chair, and a selected subcommittee member supervised. 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 consisted of 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 one to eight assistant leaders, and had both French-speaking and English-speaking markers. Each team had one or more markers who marked 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. Control papers are automatically fed into the system daily to check markers' consistency. 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. Additional audits were performed at the end of marking on any large differences between markers, or language differences.

#### **Borderline Marking (Day 1)**

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, an assistant team leader or a senior marker. Clear pass results were also audited to ensure accuracy of marking.

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

Each candidate's Day 2 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 marking guides due to marker interpretations during the first two days of live marking are stabilized before the second marking and arbitration process begin.

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

Day 3 was marked using a borderline model. All Day 3 responses were marked once and then the Day 2 and Day 3 results were combined. 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 Request for Remark of Results and Request for Performance Analysis

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

#### Review and Remarking Approach

Great care is exercised in the original marking and tabulating of the papers and results. The following review and marking 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 tabulated and the decision made regarding whether any candidates have been treated unfairly and should be granted a pass on the examination.

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

## APPENDIX B

## **SEPTEMBER 9, 2020 – DAY 1 SIMULATIONS**

See Part B of CFE report for the marking guides for Marmani Version 1 and Version 2.

(Suggested time: 240 minutes)

## COMMON FINAL EXAMINATION SEPTEMBER 9, 2020 – DAY 1

#### <u>Case</u> (DHC-Version 1)

It is April 2023, and Irene Mallik, your boss at Wilson Consulting Group, assigns you to another engagement with Distinct Hotels Corporation (DHC).

Canada was recently ranked as the fifth best tourist destination. Domestic travel within Canada is increasing due to increases in per capita disposable income and a high-level of consumer confidence. International visitors to Canada have also increased due to the decline in the Canadian dollar relative to other currencies.

With this favourable outlook, many international chains are expanding into the Canadian boutique hotel segment. Because these chains primarily use the franchise business model, the number of independently owned hotel operators has declined.

In 2021 and 2022, the boutique hotel industry achieved higher-than-expected annual growth rates. Beginning in 2023 and for the next four years, a higher than originally anticipated annual growth rate of 4% is expected.

Although many travellers choose short-term rentals through sites such as Airbnb and VRBO, the boutique hotel segment continues to appeal to travellers who want access to premium amenities or unique experiences, both inside and outside the hotel. These travellers are typically between 35 and 45 years old, fairly affluent, and willing to pay a premium for new experiences. Growth has already been seen in the sale of high-end ski and golf packages, and significantly more growth is predicted for at least five years. Increasingly, hotel operators are offering all-inclusive vacation packages that include activities such as painting, cooking and photography.

Larger hotel operators are vertically integrating either through the acquisition of suppliers or of intermediaries, such as travel agents. This allows for better cost control and improved margins, as well as diversification of revenue sources.

Business travel is forecast to increase by 2% annually, which compares to a 5% increase in leisure travel. Conference revenue has historically been 10% of room revenues. Although conference attendees increase occupancy rates, the group room rates provided are generally lower than the average daily rate (ADR).

Due to Doug Mallette's unethical behaviour, DHC lost its gold rating in March 2020 and was ineligible for the Travellers' Choice Awards from First Canadian Hotel Reviews for two years. Room revenues in 2020 and 2021 were consequently lower than forecast. Sarah MacAllister replaced Doug, who was fired. In 2022, room revenues increased, and DHC had an overall ADR of \$420 with a 72% occupancy rate. The mix of business and leisure travellers has stayed consistent.

To reflect its involvement in ski and golf resorts, DHC's Board of Directors (board) updated its vision statement:

"We make guests feel special by providing exceptional services and experiences at our hotels and resorts."

The mission statement was also updated:

"We operate unique luxury hotels and resorts, providing each guest with attentive service and experiences beyond expectations."

DHC's core values remain unchanged.

Interest rates have been increasing. DHC reached the limit on its line of credit in December 2022. The primary objectives for 2023 are to concentrate on the core hotel business and achieve a minimum occupancy rate at each hotel of 75% and an overall ADR of \$430. DHC only wants to invest in projects that will earn a minimum of 12%. The board would eventually like to have enough cash available to resume paying dividends.

DHC is in the process of making more changes and has some major decisions to make. Irene asks you to review the information she has gathered, and to draft a report for her to present to DHC's board. The report should highlight significant changes in DHC's situation and analyze the alternatives presented, focusing on the strategic considerations. If there are other significant issues that should be addressed, she asks that you let her know.

## **INDEX OF APPENDICES**

		Page
I	Transcript of Previous Board Meeting	27
II	Internal Financial Statements	33
Ш	Comparison to Industry Benchmarks	35
IV	Holiday Tours Inc.	36
V	Franchise Proposal Summary from Global Stay N Play Corp	37
VI	Proposal and Forecast for Cooking Retreats	39
VII	Proposal and Forecast for Huron Heights Hotel Conference Centre	40

# APPENDIX I TRANSCRIPT OF PREVIOUS BOARD MEETING

Derek: Thank you for attending our board meeting, Irene.

Here is a summary of the events that have occurred since early 2020:

April 1, 2020	Announced that our golf course would be semi-private.
April 1, 2020	Signed a management contract with Huron Heights Hotel (HHH), which
	corresponds with the original proposal except for the:
	<ul> <li>addition of penalties of \$50,000 per year remaining on the contract,</li> </ul>
	for cancellation with cause, to be paid by the party in breach.
	• removal of the clause requiring DHC to share in any losses with HHH.
May 1, 2020	Patrick Kuzoff invested \$20 million in DHC in return for a convertible
	bond, with terms and conditions as originally outlined. He is now a
	director of DHC.
July 1, 2020	Purchased 20% investment in Topomo Mountain Ski Resort (TMSR),
	with the same terms as originally proposed.
October 19, 2020	Completed renovations of \$11 million to the Nova Scotia hotel and total
	renovations of \$4 million to the other three hotels.
November 2, 2020	Finalized new loan arrangements with Northern Land Loans. The new
	loan for \$39 million is repayable in annual payments of \$2 million on
	June 30, bears interest at 7.2% and matures in 13 years.
May 3, 2022	Completed renovations and repairs of \$10 million to the Kelowna hotel.
July 2, 2022	Renewed line of credit, with the same terms and conditions except that
	payment of any dividends now requires prior approval by the lender.

Derek:

We have decided not to take the company public. The past two years have strained DHC's resources, primarily because TMSR's upgrades required significantly more than was budgeted. The upgrades are now complete. We need to keep in mind that our account manager at H&A Bank is monitoring our account closely as we are close to our maximum borrowing capacity.

Patrick, please start with the first proposal.

# APPENDIX I (continued) TRANSCRIPT OF PREVIOUS BOARD MEETING

Patrick:

DHC has been working with Holiday Tours Inc. (Holiday), which offers vacation packages with skiing, meals, and accommodation at the Canmore hotel, and golfing, meals, and accommodation at the Kelowna hotel. Holiday is being sold and the likely buyer plans to decrease room rates from \$395 to \$310 on average next year. The sale is still in the negotiation stage and Derek and I have discussed the option of DHC making an offer.

Kelvin: Why hasn't the board heard this before? Doesn't buying Holiday take us away from

our core business?

Jessica: Holiday sold approximately 10,000 room nights for us last year and we expect to do

the same or better this year. The number of travellers using vacation packages has been increasing annually, as has the length of stays. Without them, DHC's revenues

from both hotels would have declined during the past three years.

Patrick: Holiday's coordinator anticipates that the market of young and affluent travellers will

continue to grow. With the expected decrease in rates and, based on inquiries and reservations for 2024, the coordinator predicts a 25% increase in the number of room reservations for these packages. DHC should benefit directly from this growth. I did a rough calculation that factored in the reduced room rates and increase in occupancy, and estimate that our room revenue, net of operating costs, will decrease by about

\$40,000 for the year.

Derek: Holiday has the expertise and acquiring it is the way to grow DHC. With 15 years of

experience, Holiday has an excellent reputation and is good at selling its packages to both international and domestic travellers. Holiday not only provides accommodations and lift tickets or green fees but also transportation, meals, and other services, tailoring

them to the travellers. Holiday could develop and sell packages for our other hotels.

Alyson: Maybe we could take our chances with the new owners and re-evaluate our

relationship after a year or two.

Patrick: I have a better idea. My company, Kuzoff Golf Inc. (KGI), has been putting golf packages together for years. We could make an offer where KGI takes a 60%

ownership in Holiday, and DHC gets 40%. I believe it would be positive for both

companies. I already use Holiday for some of my golf course packages.

Derek: You have my full support, Patrick. A 60/40 split will allow DHC to invest at a lower initial

cost.

# APPENDIX I (continued) TRANSCRIPT OF PREVIOUS BOARD MEETING

Kelvin: Who decided that we invest with KGI, or that 40% is acceptable to us? Derek, don't

you own a percentage of KGI?

Derek: Yes, but it is small. It doesn't influence our decision to accept Patrick's offer to invest

in Holiday with DHC. He has already invested in DHC and our interests are aligned.

Kelvin: We need to discuss the ownership split.

Derek: We can do that later. Patrick and I are comfortable with a 60/40 split.

Alyson: But we haven't even decided to make an offer! We first need to understand the impact

of investing in Holiday compared to continuing our relationship with a new owner.

Patrick: I obtained some information from the current owners of Holiday. Irene, can you

estimate what the shares will cost and calculate the expected rate of return?

Derek: Let's move on to the Northern Ontario hotel, which continues to struggle. Its ADR and

occupancy rate are well below DHC's other locations, reducing our corporate-wide metrics. In fact, the occupancy rate has been at 60% since 2020, although the ADR has increased to \$350. And, as we feared, the spa is not doing well. Yesterday, I received a phone call from Global Stay N Play Corp. (Global), asking if DHC would be

interested in becoming a franchisee. They are looking for a resort in Northern Ontario.

Alyson: Global has ten different brands of hotels in countries all over North and South America,

Europe and Asia, ranging from three to five stars. What are they proposing for the

Northern Ontario hotel?

Derek: The hotel would be rebranded and called "FitzGeralds North." It would fit into Global's

five-star category of boutique hotels, called "FitzGeralds," which targets leisure travellers. Global proposes to provide an interest-free loan for the necessary upgrades. We were expecting to make some major renovations to this hotel in 2024

anyway. I see this as a good move.

Jessica: Last year, DHC spent over one million dollars on marketing, website costs and

promotions for this hotel with no noticeable improvements. Perhaps becoming a franchisee benefits us. However, it would mean giving up our autonomy. I am not sure

I support this change.

# APPENDIX I (continued) TRANSCRIPT OF PREVIOUS BOARD MEETING

Alyson: Will the hotel retain its key managers?

Jessica: DHC would keep its own staff but Global would assist with future recruitment, which

might be helpful. DHC has struggled to keep managers at this location, with most leaving after approximately eight months. Since they could potentially work for other

Global hotels, it might help attract managers.

Alyson: Will customers think that DHC's other hotels might also be franchised? While Global

has a good reputation, that can quickly change and DHC's other hotels might suffer.

Derek: Global provided me with the names of some of its franchisees as references. When I

contacted them to ask about their experiences, I got glowing reports. They all said that Global's targets are achievable. I have summarized the terms of the franchise proposal and I had our accounting department prepare some estimates. If we continue to operate as is, we can expect room revenue net of room operating costs and marketing costs to be \$6.7 million. If we operate as a franchisee, room revenue net of room operating costs, franchisee fees and marketing, reservation, and technology fees should be around \$9.2 million. Provided that the hotel meets the targets and standards that Global has set, it appears that DHC would be ahead financially and still have a lot

of autonomy.

Patrick: This sounds like a great opportunity.

Kelvin: I have another proposal. The chef at our Northern Ontario hotel, Chef Norman, wants

to offer cooking retreats. He thinks this would attract travellers interested in experiences while on vacation and help fill our empty rooms. As you know, he is a renowned chef who operated a successful restaurant in Toronto, Ontario, before

joining DHC. Over the years, he has visited culinary schools around the world.

Alyson: This might improve the hotel's metrics. DHC could offer cooking classes in a luxury

setting while maintaining an exceptional and unique atmosphere.

Kelvin: I could design a state-of-the-art facility in which travellers would enjoy cooking. It might

even be recognized by other designers if we do it right.

Jessica: Are there enough travellers who would be interested to make this viable? The

attraction might be short-lived.

Derek: I am also wary of this idea. Who would want to travel to Northern Ontario to cook?

### APPENDIX I (continued) TRANSCRIPT OF PREVIOUS BOARD MEETING

Alyson: The draw would be Chef Norman. He has an excellent reputation, everyone loves his

food, and he is very personable. It would help build DHC's reputation.

Patrick: I agree with Derek. It's too risky.

Derek: Let's have Irene take a look, just to be sure. Next is the management contract with

HHH.

Alyson: As you know, HHH's revenue has been falling because competitors have entered into

franchise agreements with, or been bought by, international hotel chains. Since it is having difficulty competing for leisure travellers, Martha thinks adding a conference facility to the hotel would attract more business travellers. She wants DHC to manage

the conference centre as part of its management contract.

Jessica: Martha did not renovate the rooms and lobby when DHC previously asked. And she

recently stopped contributing the 4% to the reserve fund for renovations. Is Martha now willing to add money to the reserve fund and do the renovations, in addition to a

new conference centre?

Alyson: She says renovating was delayed on purpose until a decision was made on the

conference centre. She plans to complete the work at the same time.

Kelvin: Unless the number of rooms is reduced, I don't see where there is room for a

conference centre.

Alyson: Martha plans to reduce the size of the lobby and use other available space instead of

reducing the number of rooms. Since the conference centre will be relatively small, the

number of rooms will remain the same.

Kelvin: If I can participate in its design, I could make it unique and appealing, to help attract

our loyal DHC customers. For example, it could appeal to leisure travellers for

weddings.

Derek: The Rev/PAR target was not met last year for the first time. Based on our analysis,

this was due to increased price competition from chain hotels and the related loss of

leisure travellers.

### APPENDIX I (continued) TRANSCRIPT OF PREVIOUS BOARD MEETING

Jessica: I think it was also due to the hotel's outdated appearance because Martha did not do

any renovations. I worry that it reflects poorly on DHC.

Alyson: Actually, Martha thinks building the conference centre and targeting business

travellers will improve the Rev/PAR, and I agree.

Martha has proposed revising the existing contract to include management of the conference centre, and a revised fee structure that is more favourable to DHC. We

need to understand her reasoning.

Jessica: It is becoming very difficult to work with HHH. For the past year, HHH has not given

final approval of the managers we selected. I am not sure why this is happening, but I suspect it will cause problems in the long run, since the right people aren't being hired.

Derek: Given the problems with HHH, perhaps we should refuse the modified contract.

Patrick: Good point, Derek. I agree.

Kelvin: It would be helpful to hear why you agree with Derek, not just that you agree!

Derek: In the interest of saving time, that's not necessary. Irene, please critically review

Martha's proposal and forecast and advise whether DHC should accept the proposed modifications. I think that is all for now. Do you have everything you need, Irene?

Irene: Yes. My staff and I will start on this immediately and prepare a report for the board.

Derek: Thank you. Meeting adjourned.

# APPENDIX II INTERNAL FINANCIAL STATEMENTS

Distinct Hotels Corporation Statement of Comprehensive Income For the year ended December 31, 2022 (in thousands of Canadian dollars)

Revenues		
Rooms	\$	83,886
Food and beverage	•	48,654
Spa services		1,500
Golf – annual membership fees		365
Golf – green fees		1,630
Management fees from HHH		1,426
·		137,461
Expenses		
Rooms		44,460
Food and beverage		33,085
Golf services		1,523
Spa services		1,050
Management salaries and benefits related to		000
HHH contract		898
Depreciation and amortization		11,500
Marketing and sales		4,124
Property tax, utilities and insurance		9,622
Administrative and general		20,341
		126,603
Operating income		10,858
Equity income from TMSR		356
Interest on the line of credit		(120)
Interest on the long-term debt		(5,000)
Income before taxes	-	6,094
Income taxes (27%)		1,645
11001110 10100 (21 70)		1,0-0
Net income and comprehensive income	\$	4,449

# APPENDIX II (continued) INTERNAL FINANCIAL STATEMENTS

Distinct Hotels Corporation Statement of Financial Position As at December 31, 2022 (in thousands of Canadian dollars)

Assets		
Cash and cash equivalents	\$	560
Trade receivables		1,030
Inventories		1,760
Prepaid expenses		1,490
·		4,840
Property, plant and equipment, net		153,820
Equity investment in TMSR		5,459
Interest-free loan to TMSR		8,617
Intangible assets		1,300
Total assets	\$	174,036
Total assets	Ψ	174,030
Liabilities		
Line of credit	\$	4,000
Trade payables and accrued liabilities	•	6,950
Income taxes payable		114
Contract liability – revenue		5,420
Current portion – Nova Scotia Ioan		3,000
Current portion – Ontario Ioan		2,000
		21,484
Long-term portion – Nova Scotia Ioan		30,000
Long-term portion – Ontario loan		33,000
Convertible bond		1,938
Deferred tax liability		6,810
Total liabilities		93,232
Shareholders' equity		
Share capital (4,000,000 shares outstanding)		10,175
Contributed surplus – conversion option		17,252
Retained earnings		53,377
Total shareholders' equity		80,804
Total liabilities and shareholders' equity	\$	174,036

# APPENDIX III COMPARISON TO INDUSTRY BENCHMARKS

For the year ended December 31, 2022

#### **Boutique Hotel Industry**

			Indu	stry	
	DHC		Benchi	marks	
	2022	2019	2022	2019	
Rev/PAR (Occupancy rate × ADR)	\$302	\$280	\$328	\$262	
Occupancy rate	72%	70%	80%	78%	
ADR	\$420	\$400	\$410	\$335	
Current ratio	0.2	0.2	8.0	0.8	
Debt to equity	1.2	2.1	1.9	2.6	
Total debt to assets	0.5	0.7	0.6	0.7	
Return on equity	6%	8%	12%	11%	
Operating margin	8%	9%	17%	16%	
Profit margin	3%	3%	9%	8%	

### APPENDIX IV HOLIDAY TOURS INC.

The following information has been gathered regarding Holiday:

- Holiday has historically achieved operating margins of 20%.
- For the year ended December 31, 2022, Holiday reported EBITDA of \$2.25 million.
- Holiday's share capital has not changed since its incorporation; it has two million common shares outstanding.
- The standard industry valuation of private companies specializing in vacation packages is six times EBITDA.

### APPENDIX V FRANCHISE PROPOSAL SUMMARY FROM GLOBAL STAY N PLAY CORP.

#### **Terms**

- The contract will take effect on June 1, 2023, for a 20-year term.
- On each five-year anniversary, either party can terminate the contract without penalty.
- If DHC's responsibilities, as set out below, are not met, Global can terminate the contract at any time.

#### **Fees**

- DHC will pay a franchise fee of \$200,000 upfront.
- DHC will pay a monthly franchise fee of 10% of room revenue plus a yearly marketing, reservation and technology fee of 3.5% of room revenue.

#### As part of its responsibilities, Global will:

- pay all marketing, reservation and technology costs, including upgrade and website maintenance costs, and provide signage, materials and supplies with the FitzGeralds logo.
- spend 50% of the 3.5% marketing, reservation and technology fee specifically on this hotel.
- provide an interest-free loan to DHC for required capital expenditures up to \$8 million (subject to Global's approval), due in 10 years' time or due upon termination of the agreement.
- provide the lead in hiring management for the hotel.

#### As part of its responsibilities, DHC will:

- renovate and maintain the hotel to Global's standards; any future changes to the property will require Global's approval.
- permit property inspections by Global without advance notice.
- purchase all room supplies and amenities from Global.
- assist with the hiring of management for the hotel.
- implement appropriate internal controls, including providing training for all employees.
- attend hotel management conferences on industry trends and issues, as Global directs.
- set room rates, subject to Global's approval, and use Global's central reservation system for all reservations, including group reservations.
- participate in Global's customer loyalty program.
- prepare and deliver quarterly financial statements for the Northern Ontario hotel within 30 days of the end of each quarter.

# APPENDIX V (continued) FRANCHISE PROPOSAL SUMMARY FROM GLOBAL STAY N PLAY CORP.

By the end of 2024, Global requires its franchisees to meet the following targets and expects the ADR and occupancy rate targets to increase each year thereafter.

ADR	\$420
Occupancy rate	70%
Room operating costs as a maximum percentage of gross room revenues	50%

#### APPENDIX VI PROPOSAL AND FORECAST FOR COOKING RETREATS

After conducting considerable research on cooking retreats, Chef Norman provided the necessary information to the accounting department, for it to prepare the following forecast.

	June to Dec. 2023 (7 months)	Jan. to Dec. 2024 (12 months)
Revenues	\$ 504,000	\$ 864,000
Incremental costs for food and room cleaning	(56,000)	(96,000)
Additional costs for kitchen staff	(70,000)	(120,000)
Marketing costs	(40,000)	(40,000)
Depreciation	(58,000)	(100,000)
Additional operating profit	280,000	508,000
Less taxes (27%)	(75,600)	(137,160)
Additional net (after-tax) profit	204,400	370,840
Add back depreciation	58,000	100,000
Net cash flow	\$ 262,400	\$ 470,840
Operating margin	56%	59%
Profit margin	41%	43%

- DHC will offer a one-week cooking retreat each month, with a maximum of 20 participants per retreat.
- Each participant will pay an all-inclusive price of \$3,600.
- Cooking will focus on the use of natural and local ingredients.
- The costs for accommodations and meals are estimated to be \$400 per person.
- Additional cooking staff will be required, at a cost of \$120,000 per year.
- Additional marketing costs of \$40,000 will be spent in 2023 to launch the program, and the same amount will be spent in 2024.
- The necessary kitchen renovations are estimated to cost \$1 million and could be completed by May 2023, with the first retreat held in June 2023.
- The renovations will have an expected life of 10 years.

### APPENDIX VII PROPOSAL AND FORECAST FOR HURON HEIGHTS HOTEL CONFERENCE CENTRE

Construction of the conference centre and the renovations will be completed by no later than January 1, 2024. Martha prepared the following forecast.

The proposed new rates, and the fees for management of the conference centre, are shown below. All other terms would remain as per the current agreement<sup>1</sup>, except that there will be no Rev/PAR targets for DHC to meet.

#### **Distinct Hotels Corporation**

	2024	2025	2026
Management fees – 7% of gross room revenue <sup>2</sup>	\$ 938,196	\$ 955,570	\$ 1,033,753
Management fees – 10% of gross conference			
revenue <sup>3</sup>	402,084	409,530	443,037
Licensing fee – 4% of gross room revenue <sup>2</sup>	536,112	546,040	590,716
Total gross revenue	1,876,392	1,911,140	2,067,506
Less: management salaries and benefits	(950,000)	(978,500)	(1,007,855)
Net operating income	\$ 926,392	\$ 932,640	\$ 1,059,651
	400/	4007	E40/
Operating margin	49%	49%	51%

<sup>&</sup>lt;sup>1</sup> The current agreement rates are: management fees of 5% of gross room revenue and 8% of gross operating profit, and a licensing fee of 3% of gross room revenue.

<sup>&</sup>lt;sup>2</sup> Room revenue estimates are based on an ADR of \$270, \$275 and \$280 and an occupancy rate of 80%, 80% and 85% for 2024, 2025 and 2026, respectively.

<sup>&</sup>lt;sup>3</sup> Gross conference revenue includes room rental and food and beverage from conferences, which is estimated to total 30% of gross room revenue.

(Suggested time: 240 minutes)

### COMMON FINAL EXAMINATION SEPTEMBER 9, 2020 – DAY 1

#### Case (MARMANI-Version 2)

It is March 12, 2021. You, CPA, continue to work for Marmani as corporate controller. Alain Pepin was recently hired as Marmani's COO. A consultant with six years of experience in financial and operational management and strategic planning, Alain advised mid-sized clients on expansion into global markets and on maximizing the use of technology.

Roberto did not sell Marmani to Witherspoon's. In 2019, an Athleisure division was created and a new, state-of-the-art design and production facility was opened for this division in Richmond, British Columbia. Adaptive clothing design and production remains in Toronto, Ontario. Roberto remains as CEO but has renewed his interest in designing Athleisure wear and now spends most of his time in Richmond. Roberto delegated responsibility for strategic planning, finance, production and information technology to Alain. A standalone accounting system, a customer relationship management system (CRM) and an e-commerce site were implemented to sell Athleisure products, which are only sold online.

Sonya left Marmani in late 2019. Rory Shain was hired to manage the full-time employees hired in Toronto to replace the Adaptive contracted sales agents. Rory, who reports to Karen, has become the new advocate for the Adaptive clothing division. Adaptive's sales department now consists of 11 salespeople who each have their own geographical territories across Canada and the U.S. The sales staff have built good relationships with their customers, those being hospitals, seniors' homes, rehabilitation centres and other long-term care facilities, resulting in strong recurring sales.

Marmani's mission statement was updated to reflect the added division, and in late 2020, Marmani formed a five-member Board of Directors (board), with Roberto as one of the members. The other members have strong backgrounds in: law (Jay Ting); finance and accounting (Chris Lieberman); online, retail media and advertising (Chuck Stevens); and the fashion industry (Mira Putnam). Alain has provided you with excerpts from the first board meeting.

Roberto asks Alain to prepare a strategic plan to present to the board on May 1, 2021, that will address the issues identified at the first board meeting. Roberto tells Alain that he must find ways for the company to meet its growth targets. Alain expects that his strategic plan will therefore need to be aggressive. Because you have more history with the company, Alain asks you to recommend which course of action Marmani should take, and to discuss any additional issues you identify. To help prepare your response to Alain, you spoke with some of the managers about the recent changes.

#### **INDEX OF APPENDICES**

		<u>Page</u>
I	Excerpts from First Board Meeting	43
II	Income Statement	48
Ш	Refinancing Option	49
IV	Adaptive Mass Market Line	50
V	Selling on Amazon	51
VI	Celebrity Athlete Partnership Proposal	52
VII	Article Highlights Shared by Roberto	53
VIII	Notes from Discussions with Managers	54

### APPENDIX I EXCERPTS FROM FIRST BOARD MEETING

The board's first meeting begins with a presentation of Marmani's 2020 year-end income statement.

Alain: The combined revenue for Adaptive and our new division, Athleisure, fell short of the

targeted 8% to 10% annual growth rate.

Chris: The apparel industry only averages about 4% annual revenue growth, so why such

an ambitious growth rate target?

Roberto: The growth target that I set was based on my sales projections, which I still think can

be met.

Mira: Global competition from large athleisure brands is now a factor and prices are

declining as discounters join the competition. To grow Athleisure, Marmani must cope with high demand, keep up with the latest fashion trends and contend with the industry

becoming highly competitive, putting more pressure on pricing and margins.

Roberto: True. Luckily, the Adaptive division's gross margin was higher than expected, enough

to offset the much lower-than-expected gross margin in the Athleisure division. I am

worried that our margins are being squeezed.

Chris: In that case, higher sales in Athleisure could have caused the division's gross margin

to worsen. We will need to keep a close watch on it.

Roberto: I received a request from my cousin Ray that could affect our decisions. Ray wants to

convert his debt to equity and become an active shareholder and board member. Ray wants at least one-third of the common shares after conversion. We must either accept his proposal or repay the balance of his loan by the end of June. Hurley Bank

is still offering financing.

Let's continue our discussions but bear in mind Ray's request and the possible need

for refinancing. A formal valuation will be arranged later.

Chuck: Can we talk about the Adaptive division a bit more? Roberto, is Marmani working

toward offering a more diversified collection of designs? What other plans are there

for Adaptive?

Roberto:

This segment of the industry continues to evolve. Honestly, we have not had a lot of time to spend on it recently. In fact, we have not yet replaced Sonya, our design manager, and she left over a year ago! Fortunately, our strong reputation within the health and wellness industry is sustaining us. Our relatively new sales department has managed to increase sales volumes and Rory is doing a great job of maximizing our selling prices, which is what contributed to the higher margins.

Mira:

This division is doing well. The adaptive clothing market is much larger than I thought and is growing. We know the population is aging. Shouldn't we be servicing this niche market by offering new products? Instead of focusing so much on athleisure wear, why aren't we taking advantage of this growth?

Roberto:

Adaptive clothing is not just for the elderly. We have been approached by a prominent doctor to produce a mass market line of adaptive clothing that I think has the potential for high growth. We have information on the proposal, with some input from our sales department.

Chuck:

Adaptive is providing a steady cash flow, which Marmani needs, but I think the higher growth potential is in Athleisure. I am convinced that, with the ongoing pursuit of healthy and active lifestyles, it will grow more than Adaptive and its profits will be sustainable.

Alain:

I agree with Chuck. I think Athleisure has greater potential than Adaptive. I want to expand Athleisure sales on the global market as soon as possible.

Chuck:

The fastest way to achieve global expansion is to sell online through Amazon as a professional seller in their Athleisure category. Amazon has a loyal customer base in over 180 countries. Marmani could easily reach a wider audience. Amazon's processes are so straightforward that Marmani can start receiving sales orders as soon as its account is approved and the products are listed on-line. The principle is simple: although Amazon will take a percentage of sales, the more you sell, the more money you make.

Alain:

In my experience, this option promises to generate sales quickly. However, it is important to continue to feed off that momentum. Since customer loyalty can be inconsistent, a lot of effort will need to go into keeping up with trends. Frequently refreshing the products available is usually essential for maintaining sales.

Roberto:

Industry experts predict high demand for street luxury brands, which inspired my designs for three new summer collections: "Fresh," "Flow" and "Cool." These designs should position us to successfully compete. Based on our experience in the Canadian market, I provided Alain with preliminary estimates of sales we can expect on Amazon. They might need to be adjusted but let's work with them for now.

Alain:

Selling on Amazon can help us meet our revenue growth target quickly. We will simply make up the lower margin with an increase in sales volume. The increase in volume will also create enough demand to enable continual production of new and appealing designs. I have prepared cost estimates to go along with Roberto's sales estimates.

Mira:

You know as well as I do that generating more sales without a sufficient profit margin makes no sense. Our margins are already being squeezed. In the long term, I am not sure Amazon is the best sales channel for us. We need to grow our brand profitably by finding new markets that strengthen our current brand.

Roberto:

Having never sold outside of Canada and the U.S. before, selling all three collections on Amazon may be too ambitious. I suggest we start with the collection that will provide the best financial results. Considering the increased competition, we need to price it carefully.

Alain:

Let's get CPA to suggest which collection to offer and at what sales price, and to provide further analysis and commentary on pursuing this option.

Jay:

I have a completely different sales idea. I joined this board to help Marmani benefit from my network. Recently, a lawyer I know well talked to me about one of his clients, a professional athlete. This athlete, whose name is being concealed for now for confidentiality and privacy reasons, currently partners with an athletic shoe brand and an energy drink. The lawyer disclosed that the athlete is known as being unpredictable and prone to outbursts of anger. He is apparently also a perfectionist, with high standards for himself and those around him.

The celebrity athlete wants us to design and supply a line of men's streetwear bearing his name. The first item of the line is a slim-cut athletic sweatshirt. He wants Roberto to be the creative director and they would co-design all the items. I have prepared a summary of the proposal.

Roberto:

I am excited about the idea of designing new and creative items for men. It would tie in with some of my new product ideas. I want to share the highlights of an article I read a few months ago, discussing the direction in which the athleisure trend is heading. If this arrangement works out, it could lead to others, with different celebrity athletes. My only concern is how much of my time it will require.

Jay:

According to the lawyer, the celebrity athlete is wealthy and is willing to include a guarantee of \$2 million dollars in sales of product annually, for the next five years, at a gross margin of 25%.

Mira:

I don't like it. Celebrity partnerships can be risky. Some celebrity deals have gone horribly wrong and social media notices it quickly. We don't even know which celebrity athlete we are dealing with!

Roberto:

I think the proposal offers significant advantages. Let's ask CPA to take a closer look at it.

Alain:

This proposal does not align with my vision for Marmani or your growth objectives, Roberto. My vision is to have the entire company marketing through social media and selling online, through our own website and through Amazon. If we target our marketing to our repeat customers and obtain new customers globally, imagine the potential sales growth. Marketing through social media also provides data that we can use for designing new products.

Karen is satisfied with the information she is getting from the new CRM and strongly believes that the reports she is creating with the available data are sufficient. She is reluctant to change. She fails to understand that Marmani needs to grow globally, not just in North America. In order to do this, we need to be able to react quickly to changes in the marketplace, which requires real-time information. The CRM is just a starting point. Using data analytics to understand customer needs and then offering products to meet those needs is how big companies succeed.

Karen may no longer fit with the management team at Marmani. If she does not see the need for these changes, she should be replaced.

Roberto:

Karen has been a valuable member of management for a long time. Alain, I expect you to work collaboratively with our existing management team.

Chuck: Roberto, your business has grown quickly and is more complex than when you started

it. Alain may be right about the need for Marmani to change in order to reach its growth

potential.

Roberto: Let's start by determining which options will provide the growth of the Marmani brand

that we seek based on both our strategic and financial goals. We also need to decide

quickly on financing, ensuring that the choice fits with our strategic plans.

We will make decisions about these issues at a follow-up board meeting. Alain, please

have a full report ready for us.

# APPENDIX II INCOME STATEMENT

# Marmani Inc. For the years ended December 31 (in thousands of Canadian dollars)

	2019		2020					
	Proj	ected	Ac	tual	Proj	ected	Ac	tual
Revenue								
Adaptive		\$42,650		\$43,503		\$46,100		\$45,800
Athleisure		0		0		4,000		3,800
Total revenue		42,650		43,503		50,100		49,600
Cost of sales – Adaptive	57.4%	24,500	57.2%	24,900	57.5%	26,508	56.5%	25,877
Cost of sales – Athleisure		0		0	60.0%	2,400	77.0%	2,926
	57.4%	24,500	57.2%	24,900	57.7%	28,908	58.1%	28,803
Gross margin	42.6%	18,150	42.8%	18,603	42.3%	21,192	41.9%	20,797
Expenses								
Selling, general and								
administrative		13,632		14,041		14,985		14,800
Other		200		240		370		420
Depreciation		700		700		670		670
Total expenses		14,532		14,981		16,025		15,890
Operating income	8.5%	3,618	8.3%	3,622	10.3%	5,167	9.9%	4,907
Interest expense		452		452		404		404
Income before taxes		3,166		3,170		4,763		4,503
Income taxes (25%)		792		793		1,191		1,126
Net income	5.6%	\$ 2,374	5.5%	\$ 2,377	7.1%	\$ 3,572	6.8%	\$ 3,377

### APPENDIX III REFINANCING OPTION

#### Refinancing of Ray's Loan

Terms of the long-term loan are as follows:

- The maximum amount is \$10 million.
- Repayment of principal and interest will be over 10 years.
- The rate is prime plus 2%.
- A personal guarantee from Roberto is required.
- Audited financial statements must be submitted.

The bank agreement contains the same covenant as in the past, requiring a minimum return on assets. If the covenant is breached, all payments to shareholders will require the pre-approval of Hurley Bank and may be limited.

### APPENDIX IV ADAPTIVE MASS MARKET LINE

The availability of adaptive clothing for people with physical disabilities is limited, and is often expensive and unfashionable. We have an opportunity to co-develop a lower-priced, more appealing and widely accessible line of clothing with Dr. Irving, a highly respected physician who specializes in treating people with physical disabilities.

Offered at a lower price point, the line will allow us to reach a new market. The items will focus on fitness wear designed for people with physical disabilities.

In order to access the mass market, we will sell to a large retailer with whom we have never done business. Because the price points of our current lines are typically too high for this market, our sales prices will be lower but so will our costs, allowing us to achieve a gross margin of 40%. Based on information from Dr. Irving, we can expect sales of \$2 million in the first year, \$3.5 million in the second year, and growth of 5% to 10% thereafter.

Once our products become better known, demand should increase, which should give us access to other large retailers. We can then consider various production options: in-house, if we have the capacity; or outsourcing production to manufacturers we are familiar with and who will maintain our quality standards.

Dr. Irving is willing to work with us for no personal compensation. Instead, we will provide an upfront donation of \$25,000 to a charity that supports people with disabilities and an ongoing, annual donation to the same organization of 1% of gross revenue from this mass market line.

#### APPENDIX V SELLING ON AMAZON

#### Sales Estimates (provided by Roberto, based on Canadian sales)

Probability of Sales in 2021 (in units)							
Collection Low Medium High Aver							
	45%	35%	20%				
Fresh	12,000	15,000	20,000	14,650			
Flow	19,000	20,000	21,250	19,800			
Cool	18,000	22,000	27,500	21,300			

#### **Cost Estimates (provided by Alain)**

Estimated total costs, which include Amazon's fee as well as production, shipping, customs, payment transfers and variable overhead allocation costs, are as follows.

Collection	Cost Estimate	Amazon Base Price
Fresh	\$43	\$50
Flow	\$32	\$45
Cool	\$53	\$65

We need to identify the collection that can be sold on a global scale and set the price appropriately. Based on Amazon's data analytics, to generate strong sales volumes while remaining competitive, the prices we set should not exceed 120% of the above noted Amazon base price. In order to sell on Amazon, I think we will have to accept a reduction in margin. Let's work with a margin of 35% for our pricing.

Advice from Amazon, for Amazon Sellers:

First time Amazon sellers must rely on their own retail experience and their product knowledge. Most importantly, they should follow the industry trends in pricing and keep up to date on competing products that may affect their sales.

### APPENDIX VI CELEBRITY ATHLETE PARTNERSHIP PROPOSAL

The celebrity brand must reflect a high fashion sense with attention to cut and fit, using good-quality materials and with street luxury brand elements.

#### **Design Requirements**

- Roberto will be paid a \$25,000 annual design fee.
- Roberto and the celebrity athlete will co-design the line(s); however, the final design approval
  will be given by the celebrity athlete. Design revisions will continue until the celebrity athlete
  is satisfied and approval is given.
- For the first year, the line will include six men's styles, consisting of three tops and three bottoms, each in three colours, for a total of 18 pieces, to be sold to large retailers.
- The existing line will be updated and/or a new line will be added annually.
- The celebrity athlete will retain ownership of all designs. Marmani is prohibited from manufacturing similar items under its own brand.
- The Marmani name will be on all co-designed lines.

#### **Production Requirements**

- Marmani will produce and ship the finished goods to the celebrity athlete's warehouse facility. Payment will be made on delivery.
- Marmani must be flexible enough to accommodate changes in the production and delivery schedule requested by the celebrity athlete.
- Marmani must guarantee that it can consistently and reliably supply product, without exception, or the agreement can be terminated at any time by the celebrity athlete for non-performance.

#### **Sales and Distribution Requirements**

• The scheduling, filling and outbound transportation for the final customer orders will not be Marmani's responsibility.

### APPENDIX VII ARTICLE HIGHLIGHTS SHARED BY ROBERTO

- Athleisure wear for men is one area that continues to gain momentum.
- Lululemon Athletica, the pioneering yoga-wear retailer, now generates 20% of its total sales from menswear.
- Sales of men's pants increased by 20% over last year.
- Retailers already competing on Amazon fear that Amazon.com is planning to partner with Nike to produce its own athleisure wear label.
- By 2021, sales on Amazon are expected to account for 16.2%, or \$62 billion, of apparel sales.

Source: How Many More Laps Are Left for The Athleisure Trend, Apparel News, September 7, 2020

### APPENDIX VIII NOTES FROM DISCUSSIONS WITH MANAGERS

Most of the managers are under the impression that Alain's only focus is on revenue growth at all costs. He is highly critical of how things are currently being done, which in their view is creating a climate of negativity, undermining the positive corporate culture created by Roberto.

Managers are still upset over not being given shares in Marmani as part of their compensation package and are now dealing with Alain being controlling. There is also a rumour circulating about another possible shareholder. They noted that the work atmosphere has changed and there is talk of some employees leaving.

Don expressed concern that, during Alain's recent tour of the production facility, his comments were focused on cost cutting. Alain seemed to think the process could somehow be streamlined, to reduce production costs. Don was mystified by how Alain could determine this. Alain did not seem interested in understanding the impact that changes to the processes could have on the quality of the final products.

Since the new CRM was implemented, Karen has provided an enormous amount of customer data to the managers, who feel overwhelmed with information. Rory, in particular, said the sales team is not actively using the CRM data, nor has he personally made use of it.

Rory thinks the demand for fashionable adaptive clothing remains strong. There is enough capacity in the Toronto facility to produce additional products, but the designers seem totally focused on Athleisure; ideas gathered from an important customer on ways to improve the Adaptive product designs are being ignored. Rory believes this is due to a lack of understanding of the differences between Adaptive and the new division, Athleisure.

#### **APPENDIX C**

#### SEPTEMBER 10, 2020 - DAY 2 SIMULATION AND MARKING GUIDES

### COMMON FINAL EXAMINATION SEPTEMBER 10, 2020 – DAY 2

#### <u>Case</u>

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.

#### **INDEX**

Common Information – to be read by all roles	Page
Background	57
Specific Requirements – read only pages specified for your pre-selected role	
Assurance Requirements	58
Finance Requirements	60
Performance Management Requirements	62
Taxation Requirements	64
Common Information – to be read by all roles	
Appendix I – Draft Financial Statements	65
Appendix II – Industry Background	68
Appendix III – Purchase of Ruby Taxi Inc.	70
Appendix IV – ECI Financial Projection	71
Appendix V – Implementation Plan for Step 3	72
Appendix VI – Airport Bid	73
Specific Information – read only the pages specified for your pre-selected role	
Appendix VII – Assurance – Additional Information	74
Appendix VII – Finance – Additional Information	79
Appendix VII – Performance Management – Additional Information	86
Appendix VII – Taxation – Additional Information	92

### BACKGROUND COMMON INFORMATION FOR ALL ROLES

Today is January 31, 2020. Jen Toy is a Canadian entrepreneur who lives in Calgary, Alberta, and is concerned about climate change and environmental sustainability.

In January 2017, Jen decided to start a taxi company, EnviroCab Inc. (ECI), operating in Calgary and Edmonton. ECI exclusively uses electric cars. Jen's plan involved:

- Step 1: Incorporate a standalone business, ECI, and operate it for several years.
- Step 2: Acquire an existing taxi business.
- Step 3: Convert the acquired company to ECI's business model.

Jen proceeded with Step 1 in January 2017 by incorporating ECI, issuing 1,000 common shares with voting rights to herself and \$13 million Class A preferred shares to silent angel investors. Using the funds, ECI purchased 150 electric cars, the meters required by Alberta's taxi industry regulations and 150 taxi licences issued by the Alberta government.

ECI's draft non-consolidated financial statements for the most recent fiscal year have been prepared. ECI's business model differs significantly from other Canadian taxi companies, who use self-employed drivers who own their cars. Jen believes that working conditions for taxi drivers are often substandard. She wants to provide a safe working environment with good conditions and, therefore, drivers are hired as employees.

ECI's vision is: "To be the leader in sustainable personal transportation," and its mission is: "To develop a collective transportation system that is environmentally friendly, socially conscious and respectful of its passengers and employees."

In July 2019, Jen personally loaned ECI \$2 million as the company required more cash at that time. She and the silent angel investors are willing to inject more funds if required.

On November 1, 2019, Jen executed Step 2. ECI borrowed from People First Bank (PFB) in order to purchase 100% of the outstanding common shares of the second-largest taxi operator in Alberta, Ruby Taxi Inc. (Ruby). Jen is concerned about the PFB loan covenant that requires both ECI and Ruby to comply with a maximum debt-to-equity ratio, calculated using their non-consolidated annual audited financial statements prepared in accordance with ASPE. She is considering asking PFB if they would accept annual audited consolidated financial statements for ECI for the purposes of the covenant calculation.

ECI is expected to have positive net income starting in 2022 and only Step 3 remains outstanding. Step 3 was originally scheduled to take place in 2021. However, Jen is now unsure of this timing, given the recent uncertainty that the industry is facing, with increased competition from ride-sharing services that have gained a substantial market share.

Additional information, customized to your role, is presented in your role package.

#### **ASSURANCE REQUIREMENTS**

You, CPA, are a member of ECl's quality control (QC) team. You report to the Chief Quality Officer, Jason, who is a CPA and is certified in internal audit. The department consists of three other members: François, who has a Bachelor of Applied Science in Environmental Systems Engineering, and two other members who have a Bachelor of Biomedical Engineering. Jen has asked the QC team to look into several matters, which Jason has delegated to you.

The Calgary airport is seeking bids to allow only the chosen taxi companies to pick up customers for a three-year term. Jason asks you to determine the lowest fare that ECI could bid for servicing the airport. Jason also asks you to qualitatively assess whether winning the airport contract would be beneficial to ECI.

Knowing that ASPE allows for accounting policy choices, Jason asks you to assess the current accounting treatment for ECI's taxi licences, and for ECI's acquisition of Ruby, which is currently accounted for at cost, as well as to explain how the lease and convertible debt from Step 3 should be accounted for. In addition, Jason asks you to assess the accounting treatment for the stock options and stock appreciation rights that ECI granted in 2019 to its employees, and to recommend which financial instrument to grant in the future.

Ruby has had annual audits in the past, but ECI's financial statements have not previously been audited or reviewed. PFB now requires each of ECI and Ruby to obtain an external audit for its separate entity financial statements. To help ECI's management understand what they can expect, Jason had François prepare an initial audit planning memo for ECI and he asks you to comment on it.

Jason would also like you to recommend audit procedures for the ECI and Ruby financial reporting issues he asked you to address. In addition, François has audited ECI's accounts receivable and property, plant and equipment balances and Jason asks you to review the work.

Because Ruby's drivers use their own meters, Jason is concerned that they might not pay the full amount of royalties owed. He asks you to explain how this might occur and discuss what internal controls will ensure that Ruby receives all royalty revenue.

#### **ASSURANCE REQUIREMENTS (continued)**

Management is eager to prepare for the Calgary airport contract, should ECI be one of the successful bidders. Therefore, Jason asks you to draft a memo to management, describing the procedures an external auditor would perform in order to provide the report required by the Calgary Airport Authority.

Finally, since the QC team will now be dealing with external auditors, Jen asks Jason whether an external auditor will be able to rely on the work of the QC team, and if not, to make recommendations that will ensure that this is possible going forward. Jason asks you to draft this memo.

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

#### **FINANCE REQUIREMENTS**

You, CPA, are an analyst at the consulting firm Dupuis, Plante & Potvin (DPP), of which ECI is a client. Raymond is a DPP partner and has received several requests from ECI.

The Calgary airport is seeking bids to allow only the chosen companies to pick up customers for a three-year term. Raymond asks you to determine the lowest fare that ECI could bid for servicing the airport. Raymond also asks you to qualitatively assess whether winning the airport contract would be beneficial to ECI.

Knowing that ASPE allows for accounting policy choices, Raymond asks you to assess the current accounting treatment for ECI's taxi licences, and for ECI's acquisition of Ruby, which is currently accounted for at cost, as well as to explain how the lease and convertible debt from Step 3 should be accounted for.

Raymond asks you to prepare a five-year cash budget for the combined ECI and Ruby entities in order to determine when ECI can repay Jen's shareholder loan. She has provided summary financial projections for Ruby, which assume that Step 3 is fully implemented. Raymond asks you to use Jen's projections as provided.

One of Jen's friends, Ethan, is offering to invest in ECI so the company can expand into the ride-sharing industry, either by developing its own app or by teaming up with Ryde Corporation (Ryde), an existing company. As she believes ride sharing represents the next generation of taxi companies, Jen is excited about this opportunity. Raymond asks you to assess both opportunities and provide a recommendation, after first determining ECI's required rate of return.

To incentivize more drivers to participate in the new ride-sharing program, Ethan proposes that ECI finance the purchase of electric vehicles for those people interested in driving for the ride-sharing program. Raymond asks you to discuss the financial risks associated with this proposal and recommend how ECI could mitigate those risks.

#### **FINANCE REQUIREMENTS (continued)**

Ethan proposes to invest \$5 million in exchange for newly-issued Class A preferred shares or a new class of preferred shares (Class B). Jen believes this investment will improve ECI's ability to fund expansion opportunities and wants to move ahead with Ethan's investment, but first wants your advice on which option to accept. To support this decision, Raymond asks you to calculate the conversion value of the Class B preferred shares at the end of 2024 and the percentage of ECI's common shares that Ethan will own post-conversion. The appropriate enterprise valuation multiple is five times current EBITDA.

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

#### PERFORMANCE MANAGEMENT REQUIREMENTS

You, CPA, are an analyst at the consulting firm Dupuis, Plante & Potvin (DPP), of which ECI is a client. Raymond is a DPP partner and has received several requests from ECI.

The Calgary airport is seeking bids to allow only the chosen companies to pick up customers for a three-year term. Raymond asks you to determine the lowest fare that ECI could bid for servicing the airport. Raymond also asks you to qualitatively assess whether winning the airport contract would be beneficial to ECI.

Knowing that ASPE allows for accounting policy choices, Raymond asks you to assess the current accounting treatment for ECI's taxi licences, and for ECI's acquisition of Ruby, which is currently accounted for at cost, as well as to explain how the lease and convertible debt from Step 3 should be accounted for.

Jen understands that moving Ruby to ECI's business model entails incurring significantly higher fixed costs while at the same time lowering variable costs. As part of the analysis of when to pursue Step 3, Raymond asks you to calculate the number of trips that Ruby would need to make per day, using ECI's business model, to generate the same profit as it would under Ruby's current model.

Based on a comparison of ECI's and Ruby's current business models at the operational, financial and strategic levels, and taking into consideration Jen's environmental concerns and ECI's overall strategic direction, Raymond asks you to recommend which model to adopt going forward.

The Alberta government recently adopted a Sustainable Economic Development Policy (Policy). Raymond asks you to provide Jen with arguments for how ECI's vision and strategy fit with the Policy's goals, and to explain why ECI and Ruby are eligible for funding from the financial support plan contained in the Policy.

A private equity fund, Eagle Eyes Energy Ventures (EEEV), recently approached Jen with a proposal to refinance ECI and fund its expansion plans. Jen is concerned about the governance implications of the proposal. Raymond asks for your opinion.

#### PERFORMANCE MANAGEMENT REQUIREMENTS (continued)

Maintenance of ECI's 150 cars is currently being done in service stations in the drivers' neighbourhoods, with ECI reimbursing the cost to its employees. Jen thinks that considerable savings could be realized if ECI adopts a centralized model. Raymond wants you to analyze and comment on the alternatives being considered: development of in-house maintenance or outsourcing to a service provider. Ruby's business model will not be modified for now.

Many Ruby drivers have commented that they find ECI drivers' compensation packages unappealing. Moreover, Jen wonders if ECI's drivers' employment terms provide for a fair sharing of profits and risks between the drivers and ECI. Based on comments received from several passengers, she is concerned that a fixed salary does not incentivize drivers to enhance ECI's value to shareholders and passengers. Raymond asks you to assess the incentive and risk-sharing properties of ECI's current employment agreement, and the impact on drivers' behaviour. He also asks you to analyze the relative merits of three alternative compensation packages suggested by DPP's human capital consulting group.

A group of investors is asking ECI to invest \$1 million in seed funding for additional studies on the development, construction and operation of a high-speed link between Edmonton and Calgary. In return, ECI will be granted exclusive access to the Edmonton and Calgary terminals of the link. Raymond asks you to recommend, from a qualitative standpoint only, whether this investment represents a good strategic decision for ECI.

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

#### **TAXATION REQUIREMENTS**

You, CPA, are an analyst at the consulting firm Dupuis, Plante & Potvin (DPP), of which ECI is a client. Raymond is a DPP partner and has received several requests from ECI.

The Calgary airport is seeking bids to allow only the chosen companies pick up customers for a three-year term. Raymond asks you to determine the lowest fare that ECI could bid for servicing the airport. Raymond also asks you to qualitatively assess whether winning the airport contract would be beneficial to ECI.

Knowing that ASPE allows for accounting policy choices, Raymond asks you to assess the current accounting treatment for ECI's taxi licences, and for ECI's acquisition of Ruby, which is currently accounted for at cost, as well as to explain how the lease and convertible debt from Step 3 should be accounted for.

Next, Raymond asks you to assist Jen with several tax issues. Ruby has accumulated loss carryforwards and Jen wants to ensure that they can be used after the acquisition. Raymond also asks you to calculate Ruby's taxable income and provide a detailed calculation of federal income taxes payable for the two-month period ending December 31, 2019.

To date, Jen has not personally taken any money out of ECI. As ECI obtains more investors, and begins earning income after 2021, Jen expects it will begin to accumulate cash, and she would like to receive \$100,000 in the first year. She would like you to explain to her, from a tax perspective, the options for taking excess cash out, when it becomes available, and to provide a recommendation for the best way to do so.

In the implementation of Step 3, Ruby's drivers will become employees. Raymond asks you to discuss the tax implications, to the drivers, of the change in status from contractor to employee.

Jen is considering providing additional benefits to ECI's employees, which would be extended to the Ruby drivers if Step 3 is implemented. Raymond asks you to provide an explanation of the tax implications, to both the drivers and ECI, of the proposed benefits.

With the acquisition of Ruby, ECI's shares might no longer qualify as qualified small business corporation shares. Raymond asks you to analyze the impact of the purchase of Ruby on Jen's ability to utilize the lifetime capital gains deduction, should she sell ECI in the future.

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

# APPENDIX I – COMMON DRAFT FINANCIAL STATEMENTS

#### EnviroCab Inc.

Draft Non-Consolidated Statement of Income and Retained Earnings For the years ended December 31

	2019		2018
_	Draft	ı	Jnaudited
Revenue Fares	\$ 11,250,000	\$	9,980,000
Operating Expenses			
Administrative expenses	254,000		265,000
Automobile operating costs	2,547,000		2,475,000
Depreciation	635,000		625,000
Licence amortization	150,000		150,000
Publicity and promotion	761,000		764,000
Wages and benefits	 7,975,000		7,484,000
Total expenses	12,322,000		11,763,000
Operating loss	 (1,072,000)		(1,783,000)
Other Income and Expenses			
Dividend from Ruby	100,000		0
Interest on PFB loan	(33,000)		0
Interest on shareholder loan	(60,000)		0
	 7,000		0
Loss before taxes	(1,065,000)		(1,783,000)
Income tax expense	0		0
Net loss	(1,065,000)		(1,783,000)
Deficit – opening balance	(3,879,000)		(2,096,000)
Dividends	 0		0
Deficit – closing balance	\$ (4,944,000)	\$	(3,879,000)

# APPENDIX I – COMMON (continued) DRAFT FINANCIAL STATEMENTS

# EnviroCab Inc. Draft Non-Consolidated Balance Sheet As at December 31

	2019 Draft		2018	
			Unaudited	
Assets				
Current assets				
Cash and cash equivalents	\$	1,865,000	\$	137,000
Accounts receivable – drivers		260,000		263,000
Prepaid expenses		5,000		5,000
Total current assets		2,130,000		405,000
Property, plant and equipment (Note 1)		4,284,000		4,919,000
Licences (Note 2)		4,050,000		4,200,000
Investment in Ruby – cost		3,100,000		0
Total assets	\$	13,564,000	\$	9,524,000
Liabilities				
Current liabilities				
Sales taxes payable	\$	217,000	\$	187,000
Trade payables and accrued liabilities		190,000		215,000
Total current liabilities		407,000		402,000
Shareholder loan (Note 3)		2,000,000		0
Loan from PFB		3,100,000		0
Total liabilities		5,507,000		402,000
Shareholders' Equity				
Common shares (Note 4)		1,000		1,000
Preferred shares (Note 5)		13,000,000		13,000,000
Deficit		(4,944,000)		(3,879,000)
Total shareholders' equity		8,057,000		9,122,000
Total liabilities and shareholders' equity	\$	13,564,000	\$	9,524,000

# APPENDIX I – COMMON (continued) DRAFT FINANCIAL STATEMENTS

# EnviroCab Inc. Excerpts from Notes to the Draft Financial Statements

## 1. Property, Plant and Equipment

	Useful			Net Book	Net Book
	Life		Accumulated	Value	Value
	(Years)	Cost	Depreciation	2019	2018
Vehicles	10	\$ 6,000,000	\$ 1,800,000	\$ 4,200,000	\$ 4,800,000
Office equipment	8	28,000	16,000	12,000	9,000
Electronic meters	5	180,000	108,000	72,000	110,000
		Ф. C. 200, 200	¢ 4.004.000	Ф 4 004 000	Ф 4 040 000
		\$ 6,208,000	\$ 1,924,000	\$ 4,284,000	\$ 4,919,000

#### 2. Licences

	2019	2018
Cost	\$ 4,500,000	\$ 4,500,000
Accumulated amortization	(450,000)	(300,000)
	\$ 4,050,000	\$ 4,200,000
	Ψ 1,000,000	Ψ 1,200,000

### 3. Shareholder Loan

The shareholder loan bears annual interest of 6% and has no repayment terms.

#### 4. Common Shares

There are 1,000 common shares outstanding.

#### 5. Preferred Shares

There are 13 million Class A preferred shares outstanding. The holders of the preferred shares are entitled to cumulative dividends of 9%. No dividends have been declared or paid since issuance.

# APPENDIX II – COMMON INDUSTRY BACKGROUND

## **Government Regulations**

Transportation of passengers in a car, for a fare, requires a taxi licence. The government regulates the issuance of licences and sets the safety, cleanliness and maintenance standards.

The government instituted the taxi licensing system in the early 1960s, and 30-year licences were issued for \$5,000 each at that time. The province was divided into territories, with a predetermined number of licences issued in each territory. Over the years, additional licences have been issued in proportion to population growth.

Once issued, licences can be bought and sold on the open market. The purchaser is extended the same rights as the previous owner, subject to compliance with government regulations.

In 2017, the government sold 150 new 30-year licences to ECI for \$30,000 each. This was their market value at the time, compared to approximately \$100,000 at their peak value several years earlier.

The government regulates the fares, which can vary from city to city. For example, the Calgary fare is currently a \$5 flat rate plus \$2 per kilometre, regardless of the type of vehicle. However, airport authorities regulate fares for trips starting at the airport.

#### **Industry Business Model**

Apart from ECI, all taxi companies in Alberta operate under the same business model: the taxi drivers supply their own cars, electronic meters and taxi licences, and pay all costs to operate the car, such as gasoline, insurance, maintenance and registration.

Drivers sign an exclusivity contract with a taxi company. The contract enables drivers to access the company's dispatching service. When a passenger calls the company to request a taxi, the dispatcher assigns this request to a driver through the meter installed in the car. The drivers are self-employed contractors who pay a fee to the company for dispatch and other services.; the fee is generally a percentage of the overall fare, before GST. For example, Ruby drivers pay a 7.5% royalty to Ruby on all fares.

# APPENDIX II – COMMON (continued) INDUSTRY BACKGROUND

#### **ECI's Business Model**

ECI owns the cars, meters and taxi licences. Its drivers are employees, who are paid an average of \$18 per hour, including benefits. Drivers are required to work a 40-hour week and are not allowed to work overtime. Drivers return the cars to ECI's premises at the end of each shift. ECI determines the schedule and territory that each driver covers.

Passengers pay a fare, which belongs to ECI. Each car has a meter that is linked to ECI's systems.

ECI incurs all the costs of owning and operating the vehicles. The cost of charging the electric cars is approximately \$0.02 per kilometre travelled. Annual insurance and registration costs for each car are \$800 and \$250, respectively. Car repair, maintenance and inspection costs are estimated at \$1,500 annually, plus \$0.15 per kilometre travelled. Regardless of its usage, each car is subject to an annual depreciation expense of \$4,000.

#### **Ride-sharing Services**

In recent years, several ride-sharing services have emerged in Alberta that are competing with traditional taxi services. Ride-share drivers do not require taxi licences and use their own cars to transport passengers, who use a smartphone app to request a ride. These services are tolerated by the Alberta government due to their popularity. Taxi drivers are extremely unhappy and have staged numerous protests. Having paid significant amounts of money to purchase licences, they feel unfairly treated by the government. In addition, the open market for licences has stalled because buyers are waiting until there is more certainty regarding the government's view on ride-sharing services. Although Jen is satisfied that ECI's financial future is strong, given its current projections, she wonders if ECI's licences are impaired because of market changes.

## APPENDIX III – COMMON PURCHASE OF RUBY TAXI INC.

On November 1, 2019, ECI purchased all 4 million outstanding common shares of Ruby for \$3.1 million. Ruby also has a December 31 year end. Most taxi businesses in the industry own very few tangible assets as they generally lease their premises, and the drivers own the cars, licences and meters. Taxi companies are usually bought for their reputation, faithful client base and brand recognition. Ruby owns the land and building in which it operates, and earns rental income on 75% of the building, for space not used for its operations.

At the time ECI acquired this subsidiary, the carrying value of Ruby's net assets under ASPE was \$1,160,000. According to the independent appraiser hired by ECI, the fair values of Ruby's assets and liabilities at the time of acquisition were all equal to their carrying values, except for the land, which had a fair market value (FMV) of \$800,000, compared to a carrying value of \$500,000. On the acquisition date, the building had an outstanding mortgage payable of \$1,340,000.

According to Ruby's internal financial statements, the net income earned by Ruby for the two-month period ending December 31, 2019, was \$250,000. On December 31, 2019, Ruby declared and paid a \$100,000 dividend to ECI.

# APPENDIX IV – COMMON ECI FINANCIAL PROJECTION

ECI's financial projection, which excludes any income or cash flows associated with Ruby, is as follows.

		Year	Projection ended Decemb	ber 31	
	2020	2021	2022	2023	2024
Fare revenue	\$ 11,900,000	\$ 12,600,000	\$ 13,400,000	\$ 14,200,000	\$ 15,000,000
Operating income (loss)	\$ (820,000)	\$ (150,000)	\$ 480,000	\$ 1,390,000	\$ 2,095,000
Finance costs (Note 1)	\$ (318,000)	\$ (318,000)	\$ (318,000)	\$ (318,000)	\$ (318,000)
Income (loss) before taxes	\$ (1,138,000)	\$ (468,000)	\$ 162,000	\$ 1,072,000	\$ 1,777,000
Additional information:					
Automobile operating costs					
and driver wages and benefits	\$ 9,600,000	\$ 10,250,000	\$ 10,800,000	\$ 11,500,000	\$ 12,300,000
Depreciation and amortization	\$ 785,000	\$ 785,000	\$ 785,000	\$ 785,000	\$ 785,000

Note 1: Finance costs are comprised of interest on the PFB and shareholder loan. The full balance of the PFB loan is due on December 31, 2024.

# APPENDIX V – COMMON IMPLEMENTATION PLAN FOR STEP 3

Step 3 involves the acquisition of 200 new cars and hiring Ruby's current 200 self-employed drivers as employees. The drivers will use their existing electronic meters and licences. ECI's plan is as follows:

- 1. Ruby will lease 120 electric cars. It has an agreement in principle with Cars Financing Inc. to lease the cars for a seven-year term, with monthly payments of \$500 per car. The cars currently sell for \$40,000 each. At the end of the lease, Ruby may purchase the cars for \$5,000 each, which is their estimated fair value at that time.
- 2. Ruby will purchase 80 electric limousine taxis for \$50,000 each, financed through long-term debt. The new debt will be payable in five years and will bear annual interest of 4%, payable at the end of each year. The debt will be convertible at the option of the holder into 1 million common shares of Ruby. The Environmental Advantages Fund, a government-backed venture capital fund, has already expressed interest in providing this debt. The market interest rate for similar debt, without the conversion feature, is 6%. The limousines are expected to have a useful life of 10 years.

If the ECI business model is implemented for Ruby, each new car is expected to have the same annual insurance, inspection, registration and maintenance costs, and the same electrical consumption per kilometre travelled, as ECI's cars.

## APPENDIX VI – COMMON AIRPORT BID

Commencing in 2021, the Calgary airport is offering exclusive access to its premises to three taxi companies. Interested companies must submit a bid proposing a set fare for a trip from the airport to anywhere in the Calgary area. The three lowest bids will each be awarded a contract and the standard fare will be the average of the three companies' bids. All companies will be required to comply with certain performance measures as established by the airport.

Airport officials state that an average of 3,000 taxi trips depart from the Calgary airport daily, and the three companies selected will have the right to approximately one-third of the trips. The average round trip is 20 kilometres.

If ECI is one of the winning bids, ECI will allocate 40 cars for airport use only, from 6:00 am to midnight daily. The airport will require a minimum number of taxis to be at the airport during that time. It is estimated that a car allocated to the airport will miss out on 30 trips daily that it would otherwise have provided elsewhere in the city. However, those trips are shorter, averaging eight kilometres each and providing an average fare of \$21 each.

Appendix C: September 10, 2020 – Day 2 Simulation and Marking G	Juides
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Page 74

# ASSURANCE ROLE ADDITIONAL INFORMATION

# APPENDIX VII ASSURANCE – ADDITIONAL INFORMATION

## **Stock Compensation Packages**

On January 2, 2019, when the estimated value of ECI's shares was \$1 per share, each of ECI's 150 drivers was given the choice of two stock-based compensation packages:

- 1. 1,000 options entitling them to acquire one ECI non-voting common share per option at an exercise price of \$1; or
- 2. 1,000 stock appreciation rights entitling them to a cash payment representing the difference between the market value of one ECI share at the time of exercise and a \$1 benchmark value per share. For example, if the shares are worth \$1.85 each, the holder is entitled to a cash payment of \$850 (1,000 × \$0.85).

Only drivers who satisfy the five-year vesting requirement will be eligible to exercise either instrument.

Using the Black-Scholes model, the controller has determined that, on January 2, 2019, the fair value of the options was \$0.35 each. He also determined that, on December 31, 2019, ECI's non-voting shares had an estimated fair value of \$1.50 each, and the fair value of the options, using the Black-Scholes model, was \$0.75 each.

Of all the drivers, 60% selected the stock options and 40% selected the stock appreciation rights. Jen estimates that 80% of the drivers granted these instruments will still be employed by ECI on January 2, 2024.

No amounts have been recorded in the financial statements for these packages.

## **Audit Planning Performed by François**

The risk of material misstatement at the financial statement level is assessed as moderate. Although Jen's extensive business experience and the straightforward nature of the taxi business lowers the risk, accounting for the acquisition of Ruby is complex and increases risk.

Materiality is calculated as \$106,500, or 10% of the loss before income taxes for the year ended December 31, 2019; given the moderate risk of the audit, I think this is appropriate.

Because this will be the first audit of ECI's financial statements, we must adopt a substantive approach for all accounts.

## Accounts receivable working paper

From December 31, 2018, to December 31, 2019, accounts receivable decreased by approximately 1%. Since this decrease is immaterial, work was limited to agreeing the total accounts receivable balance per the aged subledger to the financial statements.

#### Property, plant and equipment working paper

				Prepared by: Date prepared:		ançois ı. 22, 2020
Account	Notes	Cost	Accumulated Depreciation	2019 Net Book Value		2018 Net Book Value
Vehicles Office equipment	1, 2, 5 1, 3, 5	\$6,100,000 28,000	\$1,800,000 16,000	\$4,300,000 12,000		\$4,800,000 9,000
Electronic meters	1, 4, 5	180,000	108,000	72,000		110,000
		\$6,308,000	\$1,924,000	\$4,384,000	٧	\$4,919,000
		Λ.	Λ.	٨		٨

#### Notes:

- 1. Balances agreed to capital asset continuity schedule.
- 2. Purchase price of two new vehicles, totalling \$200,000, as confirmed with management.
- 3. Per management, the only addition was a new desk for Jen. Since the amount is immaterial, no further work considered necessary.
- 4. Per management, no additions or disposals, so no further work considered necessary.
- 5. Accumulated depreciation recalculated. No errors noted.

## Tick marks

- A Footed
- v Cross footed

#### **Taxi Fares and Related Processes**

Approximately 80% of all trips are arranged through Ruby's dispatch centre and 20% result from passengers hailing taxis. Passengers can pay their fares by cash or credit card. Drivers contracted by Ruby provide their own meters to track fares. Because Ruby does not require a specific model, a considerable variety of meters are used.

A small number of drivers have meters that print receipts automatically while also transmitting an electronic record of the fare to Ruby. Most of Ruby's drivers have basic meters that only determine the fare to be charged. These drivers use handwritten receipts that they fill out with the date, pickup and drop off points, fare and GST registration number. Receipts are only provided when requested by the passenger. Whether or not a receipt is issued, the driver notes the trip in a paper log so that the total amount of fare revenues can be tracked.

Regardless of the type of meter used, drivers are required to pay the 7.5% royalty revenue to Ruby every Sunday. On a weekly basis, Ruby's accountant calculates the royalty and reconciles it to the payment received, and drivers are required to reimburse Ruby for any shortfall. Ruby allows its drivers to submit royalty revenue by cash or cheque delivered to Ruby's office or by electronic fund transfer. Because of the bank fees involved, few drivers pay by electronic fund transfer. Other than late remittances, Ruby has not encountered any difficulties with royalty revenues paid in cash. However, several of the cheques written by drivers have not cleared the bank due to insufficient funds. Additionally, Ruby's accountant does not have time to follow up on outstanding amounts. As a result, there have been several instances in which remittances have been late, or have not been made prior to a driver leaving Ruby, necessitating writing off the royalty receivable.

## **Calgary Airport Contract**

At the end of the first year of the contract, each successful bidder must submit to the Calgary Airport Authority an audit-level *CSAE 3530 Attestation Engagement to Report on Compliance* report, from an independent auditor, attesting to the company's compliance with the following performance measures:

- A minimum of 20 taxis from the company are present at the airport between 6:00 am and midnight.
- The company charges passengers the agreed-upon fare.
- All vehicles are insured, against property and casualty losses, with liability coverage for passenger injuries of no less than \$5 million per occurrence.
- All vehicles pass a 100-point safety inspection on a quarterly basis.
- No more than 5% of trips result in passenger complaints regarding the vehicle's condition, the way it is driven or the driver's conduct toward their passengers.

#### Structure and Work of the QC Team

The QC team's main responsibility is to identify processes and procedures within ECI where improvements can be made; however, there is no formal document outlining its role in ECI or the team's reporting structure. The team tests both financial and non-financial processes. Jason uses his professional judgment to decide what to review, and chooses the next project once the current one is complete. The controller approves the team's budget, responds to the team's recommendations and approves the team's new hires.

François has indicated an interest in enrolling in an internal audit program but has not yet done so. His work is not always reviewed in a timely manner. Although all of his work and reports are reviewed eventually, the controller sometimes receives audit reports before they have been reviewed and before deficiencies in the work performed have been addressed.

During the year ended December 31, 2019, the team audited the internal controls intended to mitigate significant risks to ECI's operations, and did not report any deficiencies.

The team has not yet had an opportunity to audit Ruby's internal controls, although preliminary discussions with Ruby's former owner suggests it has strong controls in most areas. Jen has asked Jason not to question Ruby's management when the team does begin to perform such audits. Because it is important that the relationship with Ruby's management is strong prior to completing Step 3, Jen does not want them to feel they are being criticized.

Appendix C: September 10, 2020 – Day 2 Simulation and Marking G	Juides
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Page 79

# FINANCE ROLE ADDITIONAL INFORMATION

# APPENDIX VII FINANCE – ADDITIONAL INFORMATION

## **Capital Budgeting Policy**

To ensure that it is prioritizing projects that provide the best return, ECI recently developed a capital budgeting policy. To assess projects, ECI requires a rate of return equal to its weighted-average cost of capital plus a premium of 5%.

## Market information

Here are some public companies that could be somewhat comparable to ECI:

		Unlevered	Debt to Total
Company	Description	Beta	Capital
Diamond Cabs	Largest taxi operator in Ontario; drivers own	0.8	50%
Inc.	their taxis and licences	0.8	50 /6
Medallion	Acquires taxi licences in various provinces	1.1	10%
Financial Inc.	and rents the licences to taxi drivers	1.1	1076
	Second-largest taxi operator in Ontario;		
We Drive Ltd.	drivers own their taxis but rent licences from	1.0	60%
	the company		
CarShare Inc.	The only publicly traded car-sharing	0.4	80%
Cai Silai e IIIC.	company; operates in the United States		

## Rates:

Risk-free rate	3.0%
Cost of debt	5.5%
Market rate of return	8.5%
Size premium	6.0%
Tax rate	26.0%

## Ryde Green – Ride-sharing Opportunity

In 2017, Ryde began operating a ride-sharing service in Calgary. Ryde has marketed itself as a reliable and safe ride-sharing service, with over 500,000 registered users. Ryde's business model is to take a 20% royalty on each fare.

Ryde has approached ECI to add a premium, environmentally friendly, option to Ryde's smartphone app, which will be named "Ryde Green." A number of electric vehicle drivers already participate in Ryde's existing ride-sharing service; Ryde expects there will be substantial driver and passenger demand for this premium service. Ryde and ECI would enter into a 10-year agreement to operate the program. All upfront costs and ongoing revenues and expenses will be shared equally.

Ryde estimates that adding this option to its app will cost \$500,000. To promote the option, the first 5,000 passengers to select the Ryde Green option will be given their first trip for free. For these trips, drivers will be paid the fares they would otherwise have received from the passengers.

Ryde believes the premium service will generate an average fare of \$1.50 per kilometre, and that a 20% royalty would still be appropriate for the premium service. Going forward, Ryde believes this premium service will attract 10,000 trips per week, with an average trip distance of eight kilometres. Further, if the government resolves the issues related to the ride-sharing services, Ryde expects demand for this service to double.

Ryde evaluates all new drivers, inspects their vehicles prior to approval and performs random vehicle inspections of its drivers. Annual costs related to driver evaluations and vehicle inspections are expected to total \$200,000. Other annual operating costs are expected to equal 20% of Ryde Green's revenues.

If ECI does not team up with Ryde, Ryde will team up with a different company.

## **EcoCab – Alternative Ride-sharing Opportunity**

ECI is considering developing its own smartphone app, called "EcoCab." This is expected to cost \$2.5 million and will be led by Ethan, who developed an app in his spare time and is confident that he can lead this project. To develop a ride-sharing customer base, ECI believes it will need to offer its first 10,000 passengers a free trip.

EcoCab will charge its customers a fee of \$1.50 per kilometre (like Ryde Green) and pay its drivers a flat fee of \$1.20 per kilometre. Going forward, Ethan believes that EcoCab (like Ryde Green) will attract 10,000 trips per week. Further, if the government resolves the issues related to ride-sharing services, there is potential for the number of trips per week to double.

ECI would adopt the same driver enrolment, driver evaluation and vehicle inspection model as Ryde. ECI does not have experience with driver evaluations and vehicle inspections but believes it can subcontract to a third party for the same total cost as Ryde. Other annual operating costs, including the cost of hiring a manager to oversee this program, are expected to total 30% of ECI's net revenues (after paying driver fees) from EcoCab.

If passenger demand exceeds supply, ECI will consider using ECI's and Ruby's drivers to supplement the driver pool.

## **Car Financing Program**

To attract drivers interested in buying an electric car and driving for the ride-sharing service, Ethan proposes that ECI offer a low-interest financing program.

Buyers will be able to finance the full purchase price of the car with no initial deposit and no credit check, which ECI believes will be attractive. Drivers must commit to driving at least 20,000 kilometres per year for the ride-sharing service.

To provide this financing, ECI will partner with SafeBank. Buyers will receive financing from two sources:

- Loan #1: Half of the purchase price will be financed by SafeBank at their typical car financing rates, repaid over Years 1 to 5.
- Loan #2: Half of the purchase price will be financed by ECI at a 0% interest rate. If a driver fails to meet the 20,000 kilometre-per-year requirement, the interest rate increases to 10%. The buyer will only make interest payments during the first five years and will then repay the principal by making equal annual payments, plus interest, during Years 6 to 10.

SafeBank will register a first security lien, and ECI will register a second security lien, on the car. ECI does not believe other security is necessary as either lender can repossess the car if payments are not made.

To provide ECI with the funds required to extend Loan #2 to the buyers, SafeBank has offered ECI an operating facility at a floating rate of prime plus 1%, secured by a general security agreement over ECI's assets. Prime is currently 3%.

ECI believes that, due to the interest rate penalties, all drivers will meet the minimum kilometre commitment and there will be no loan defaults.

## **Ruby Financial Projection**

	Projection							
	Year ended December 31							
	(in thousands of Canadian dollars)							
	2020		2021		2022		2023	2024
Royalty revenue	\$ 18,700	\$	19,900	\$	21,200	\$	22,600	\$ 24,000
EBITDA	\$ 2,800	\$	3,280	\$	3,640	\$	4,050	\$ 4,470
Depreciation and amortization								
Building	\$ 100	\$	100	\$	100	\$	100	\$ 100
Other assets	\$ 850	\$	850	\$	850	\$	850	\$ 850
Debt payments (Note 1)								
Interest	\$ 55	\$	50	\$	44	\$	38	\$ 33
Principal	\$ 125	\$	130	\$	136	\$	142	\$ 147

Note 1: It is assumed that the convertible debt outstanding with the Environmental Advantages Fund is converted into common shares of Ruby at the end of 2024.

## **Ethan – Proposed Investment**

Ethan has proposed the following two investment options in ECI (including its investment in Ruby):

- 1. Class A Preferred Shares: Investment of \$5 million in Class A preferred shares; or
- 2. <u>Class B Preferred Shares</u>: Investment of \$5 million in Class B preferred shares, which convert into common shares at the end of 2024 at a conversion price equal to the fair value per common share at the time.

The Class B preferred shares do not carry any dividends.

Upon Ethan's investment, a board will be created for ECI with at least five board members. Ethan will have the right to nominate 20% of the board members. Upon conversion, Ethan will be permitted to nominate a number of board members consistent with his percentage of ownership interest in ECI.

Jen believes that Ethan will be a great partner but wants to ensure that she retains control of ECI. Also, while Jen is interested in Ethan's proposals, she wants ECI to remain true to its purpose and believes that the traditional taxi model is still financially viable.

# PERFORMANCE MANAGEMENT ROLE ADDITIONAL INFORMATION

## **Sustainable Economic Development Policy (Policy)**

The recently adopted Policy contains two components: long-term social and environmental goals for the province; and a financial support plan to help businesses transition toward economic sustainability while meeting these goals.

The Policy outlines the following targets to be achieved by 2030:

- A 20% reduction in greenhouse gas emissions—mostly carbon dioxide
- A 30% reduction in kilometres driven for personal use
- A 40% reduction in gasoline consumption
- A 50% reduction in sales of fuel-consuming cars and trucks
- A 50% reduction in poverty

To help support achievement of these goals, the government is offering funding to businesses and organizations that meet the following criteria:

- The funding must be used for new investment in capital expenditures that contribute to the achievement of the Policy's social and environmental targets.
- Businesses must be either profitable or expect to become profitable in the near term.
- Businesses must provide their employees with working conditions, salaries, benefits and vacation that meet the industry's median.
- Businesses must be controlled ultimately by either a person or an entity located in Alberta.
- Priority will be given to not-for-profit entities, cooperatives, employee-owned entities and small- and medium-sized businesses.
- Priority will be given to high-pollution industries.

According to recent statistics, transportation accounts for approximately 30% of greenhouse gas emissions; road transportation accounts for about 75% of those emissions.

## **Financing Offer from EEEV**

EEEV is the private-equity division of Integrated Oil Corporation (Integrated), one of North America's largest oil and gas firms. It has approached Jen with a proposal to provide up to \$10 million in financing to ECI.

The proposal includes creating a new ECI board, with the following governance terms:

- As long as Jen owns at least 50% of ECI's equity, Jen will choose the chair from a list of three candidates submitted by EEEV.
- Excluding the chair, EEEV will appoint one less director than ECI.
- An executive committee of the board will be established. It will be comprised of three members: the chair, one appointed by Jen, and one appointed by EEEV.
- Any capital investment exceeding \$20,000 must be approved by the executive committee.
- Dividends cannot be paid unless retained earnings exceed \$2 million and ECI is current in its interest and capital repayments to EEEV.
- All other financing by ECI must be subordinate to EEEV.

ECI's board is currently comprised of Jen and three other members. To fulfill the first governance term above, EEEV is suggesting three individuals as potential board candidates. All three have extensive business experience and currently serve on several boards: Chris, a former vice-president of international operations at Integrated; Leslie, a geologist and Integrated's former vice-president of exploration; and Adrian, a chemical engineer and former president of a large pipeline company. For the chair, EEEV is presenting three additional possible candidates who are all currently members of EEEV's board.

#### **Vehicle Maintenance**

While electric cars are supposed to be low maintenance, Jen has noticed that ECI cars need servicing more than she expected, often for minor accidents or for accelerated wear of brakes.

There have been many very negative comments in social media about ECI drivers' appearance and behaviour. In contrast, car-sharing services such as Ryde often receive positive feedback about car cleanliness and timeliness.

Overall maintenance costs for electric cars are estimated as follows:

Fixed annual costs	\$1,500
Incremental variable costs per kilometre driven	\$ 0.15

These figures assume that cars on the road typically make 30 trips per day, averaging eight kilometres, and that each car is driven approximately 100,000 kilometres per year.

Jen received a proposal from Lassonde Brothers Inc. (Lassonde), which operates maintenance centres and body shops in Calgary and Edmonton. Lassonde is offering a three-year contract for the servicing of ECI's 150 cars. For the first year, the fixed-cost contract will be equivalent to ECI's current maintenance costs, less 5%. In the second and third years of the contract, the amount will be revised, based on the previous year's actual costs. The revised amount could be as much as 10% more or 5% less than in the previous year.

Jen is also considering performing all car maintenance in-house, using the building Ruby owns in Calgary. To provide enough space for the service centre, one of the existing tenants' leases would need to be broken, at a one-time cost of \$20,000. The tenant currently pays \$20,000 a year and six years remain on the lease. Also, the building would need to be expanded, at a cost of \$3 million, comprised of \$400,000 for the land, \$1 million for the building and \$1.6 million for the equipment. It is estimated that the building will have a 20-year useful life and the equipment a 10-year useful life, with both assets having negligible salvage values. Estimated annual costs will be \$1.3 million for mechanics' wages and benefits, \$250,000 for property taxes and other building costs, and \$500,000 for supplies and parts. ECI's administrative manager will act as the service centre manager and will be paid \$15,000 more than their current annual salary of \$60,000 to take on this role. The manager is expected to divide their time equally between both roles.

## **Employment Terms for ECI Drivers**

ECI drivers are currently paid an hourly wage plus benefits. DPP's human capital consulting group is suggesting three alternative compensation models for ECI drivers, and could eventually be used for Ruby drivers.

- Option 1: Keep the current compensation structure and set up a profit-sharing plan, with 10% of any profit before income tax being distributed to all drivers, in proportion to their annual salary.
- Option 2: Keep the current compensation structure and set up an incentive plan, with 2% of the fares earned by a driver being paid to the driver on a weekly basis.
- Option 3: Replace the fixed salary with a commission of 20% of fares earned by the driver.

Jen recently read an article about the importance of establishing long-term relationships with specific passenger groups in order to increase revenue stability. Because of their recurring transportation needs, hotels, hospitals, health clinics, airlines and businesses with extensive international operations were mentioned as having the potential to generate long-term revenue streams. As ECI does not currently have any such relationships, Jen would like to ensure that drivers are incentivized to develop them.

## **High-speed Link**

It is estimated that almost 90% of the individual, inter-city traffic between Edmonton and Calgary can be captured by a high-speed link. Most of that traffic is for business or government purposes, resulting in most individuals regularly commuting back and forth between the two cities.

A group of investors is proposing a high-speed link between Edmonton and Calgary, with terminals located in both cities' downtown districts. The system has been pilot tested and has received authorization to move to the experimentation phase. The link will use environmentally-friendly energy sources. The group has already invested \$10 million in the venture, which will require an estimated total investment of \$200 million. The group is offering ECI exclusive access to its two terminals in exchange for a one-time \$1 million investment.

Thirty taxis would need to be assigned to each terminal. The group of investors is interested in ECI as they want the passengers' positive experience on the high-speed link to continue upon arrival at their destination, and for both modes of transportation to be environmentally friendly.

Appendix C: September 10, 2020 - Day 2 Simulation and Marking Guide	Appendix C:	September	10, 2020	- Day 2	2 Simulation	and Marking	Guides
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Page 92

# TAXATION ROLE ADDITIONAL INFORMATION

## APPENDIX VII TAXATION – ADDITIONAL INFORMATION

## **Ruby Tax Information**

## For the 10 months ending October 31, 2019

The controller has prepared the tax return for the deemed year end at October 31, 2019. Other than using October 31 as the deemed year end, he has not considered any impacts of the acquisition of control.

At October 31, 2019, the draft return shows the following undepreciated capital cost (UCC) balances:

Class 1	\$ 1,500,000
Class 8	\$ 50,000
Class 14.1	\$ 1,500
Class 50	\$ 75,000

At October 31, 2019, the FMV of the office furniture was \$25,000 and the computer equipment was valued at \$175,000. The building had an FMV of \$1,680,000, and Ruby had portfolio investments with both an adjusted cost base and FMV of \$120,000.

The draft return also shows:

- a non-capital loss carryforward of \$35,000.
- non-eligible refundable dividend tax on hand (NERDTOH) of \$34,000.
- eligible refundable dividend tax on hand (ERDTOH) of \$65,000.
- a general rate income pool (GRIP) of \$2 million.
- an allowable capital loss of \$50,000 from the sale of some investments on October 15, 2019. There were no capital gains during this period.

During the 10 months ended October 31, 2019, Ruby did not declare any dividends.

## **Ruby Tax Information (continued)**

#### For the two months ending December 31, 2019

During November and December, Ruby made the following purchases and disposals of capital property:

- To better align its IT functions with ECI, Ruby spent \$20,000 on new enterprise resource planning (ERP) software.
- A new computer was purchased for the accountant, for \$2,500. The old computer originally cost \$1,000 and was donated to a charitable organization, which issued a charitable donation receipt to Ruby for its FMV of \$500.
- Some old desks were sold to drivers for personal use, at FMV, for a total of \$700.

For November and December, total rental revenue of \$30,000 was collected on the rental portion of the building. The building was constructed in 2011 and is comprised entirely of commercial office space.

For the two-month period ending December 31, 2019, expenses included the following:

- Accounting depreciation and amortization was \$15,000.
- In an effort to retain drivers after the acquisition, Ruby spent \$4,000 on meals and entertainment.
- Golf club dues of \$3,000 were incurred.
- As required for the building mortgage, premiums of \$100 per month were paid for life insurance on Jen's life.
- Mortgage interest for the two months was \$11,000.
- Legal fees of \$5,000 were incurred to refinance the mortgage on the building.

Ruby did not record any income tax expense for the two-month period and the controller has said he will do this, so you do not have to prepare the entries.

The December 31, 2019, a dividend was declared and paid as an eligible dividend. Ruby also received \$6,000 in eligible dividends, which was included in its net income.

## **Ruby Drivers Changing from Independent Contractors to Employees**

Once the Ruby drivers become employees, ECI will be responsible for most of the cost of operating the taxis. However, the drivers will be responsible for:

- Car washes and cleaning the car.
- ECI-branded shirts, required to be worn while on duty.
- Bottled water and snacks to provide to passengers, which has become standard practice in the industry.

The drivers want to know if they can deduct these costs for tax purposes once they become employees.

Ruby drivers will either retain their original taxi, which is in Class 16 with a 40% rate, as a personal vehicle or sell it to another taxi driver. In either scenario, the drivers will keep the electronic meters to use in their ECI-owned electric vehicles.

One thing the drivers liked about being self-employed was the ability to claim input tax credits on their GST returns for GST paid on business expenses. Once they become employees, they hope they can still get input tax credits on their employment expenses.

#### **Driver Benefits**

The following benefits are being considered for the ECI drivers, and if Step 3 is completed, will eventually be also implemented for the Ruby drivers:

- ECI will provide private health and dental programs, with premium payments divided evenly between ECI and its drivers.
- The provider of the private health insurance has a family assistance program. Should they opt in, the drivers will pay 100% of these premiums.
- ECI will establish a long-term disability plan. ECI will pay the premiums, but Jen wonders if there are any tax advantages, should the drivers choose to include the premium in their income as a taxable benefit.
- ECI will pay for the full cost of drivers to maintain the correct driver's licence required to transport passengers and for any medical examinations required in the process.
- ECI will pay for a gym membership so drivers can get exercise, especially during the Alberta winters.
- ECI is considering a stock option plan, in which each driver is offered 100 shares with an exercise price of \$12.50. The current FMV of ECI's shares is \$5.00 and is expected to rise to \$25.50 in the future.

# DAY 2 – MARKING GUIDE – COMMON ENVIROCAB INC. (ECI)

In all roles, the candidate is expected to calculate the lowest possible fare that ECI could bid for the airport contract, and provide a qualitative assessment of whether winning the airport contract would be beneficial to ECI. The candidate is also expected to discuss the accounting issues related to the lease and convertible debt from the Step 3 plan initiatives, the potential impairment of the taxi licences and the recent Ruby acquisition.

To: Jen Toy From: CPA

Subject: ECI requests

## **Assessment Opportunity #1 (Common)**

The candidate provides a quantitative analysis of the Calgary airport bid.

The candidate demonstrates BREADTH or DEPTH in Core Management Accounting.

CPA Map Technical Competency:		
(Applicable comp map is 2019 modified, i.e., DAIS and GST/HST are not testable)		Core
3.5.2	Evaluates sustainable profit maximization and capacity management performance	Α

## **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.4.7 Explicitly articulates and justifies assumptions.
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions.

## Airport Bid - Quantitative Analysis

Jen has requested an analysis of the lowest price that ECI could bid for exclusive rights to service the airport next year. We therefore need to find the fare that covers all incremental costs of servicing the airport. It is expected that ECI will take approximately one-third of the 3,000 daily trips, or 1,000 trips per day.

Many of the costs that ECI incurs to operate its vehicles, such as wages, insurance, registration, the fixed portion of the maintenance costs and depreciation, are fixed and would be incurred regardless of whether ECI takes on the airport bid. Therefore, only the variable and opportunity costs are relevant to the following analysis.

	With Airport Contract	Without Airport Contract		
Electricity			•	
Number of trips	1,000	1,200	(40 drivers × 30 trips/day)	
Number of km per trip	20	8		
Number of km	20,000	9,600	•	
Cost per km	\$0.02	\$0.02		
Cost	\$400	\$192	Incremental cost:	\$ 208
Variable maintenance				
Number of km	20,000	9,600		
Cost per km	\$0.15	\$0.15		
Cost	\$3,000	\$1,440	Incremental cost:	1,560
Opportunity cost – lost reven	ue			
Number of trips		1,200		
Average fare per trip		\$21	_	
		\$25,200		25,200
Total incremental cost of airp	ort contract for E	CI		\$26,968
Number of trips			÷	1,000
Cost per trip				\$26.97

The lowest fare that ECI could bid for servicing the airport is \$26.97 per trip.

For Assessment Opportunity #1 (Management Accounting), 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 airport bid.

**Competent** – The candidate provides a reasonable quantitative analysis of the airport bid.

**Competent with distinction** – The candidate provides an in-depth quantitative analysis of the airport bid.

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

The candidate performs a qualitative analysis of the Calgary airport bid.

The candidate demonstrates BREADTH or DEPTH in Core Management Accounting.

CPA Map Technical Competencies:		Core
3.5.2	Evaluates sustainable profit maximization and capacity management performance	Α
2.2.1	Assesses whether management decisions align with the entity's mission, vision, and values	В

## **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

## Airport Bid - Qualitative Analysis

A final decision on whether to submit a Calgary airport bid needs to go beyond the financial analysis to include a comprehensive qualitative analysis. In that context, several elements need to be considered.

#### Pros:

- During a period when ride-sharing entities are aggressively competing with traditional taxi companies, this contract would provide an additional, stable volume of rides.
- Because ECI's cost structure includes high fixed costs, a stable volume of rides reduces the
  risk of not reaching the break-even point. The airport bid will provide a guaranteed revenue
  stream that will help offset this risk.
- ECI will gain additional exposure to a new pool of customers, who might become regular clients afterwards.
- Given that they are paid a set salary, drivers may prefer to wait for fares at the airport rather than drive around, searching for fares; this would improve driver morale.

#### Cons:

- If ECI is one of the winning firms, the established price would be fixed for three years, and costs would likely increase during this period due to inflation.
- By assigning cars to the airport, and thus restricting its supply in Calgary outside of the airport area, ECI is leaving an opportunity for the competition to pick up passengers and build relationships with some longer-term contracts, such as at hotels, where business people need transportation on a regular basis.
- If ride sharing continues to grow and people choose it over taxis from the airport, ECI's vehicles may be parked at the airport, unable to earn revenue.
- By being assigned to the airport, ECI reduces its presence in the city and therefore does not build its brand within the community.
- The minimum number of taxis required to be at the airport from 6:00 am to midnight may impose an undue burden on ECI, especially if cars are needed elsewhere in the city. A way to mitigate this risk would be to recruit more drivers and increase the overall number of available taxis for potential ECI clients, if the airport bid is won.
- Drivers at the airport may be less engaged as they may spend more time waiting for fares (which does not require the drivers to be attentive); on average, they will have five fewer fares per day (200 less fares under airport contract / 40 drivers).

#### Other considerations:

• The bid, and the project's ultimate profitability, is based on several assumptions regarding: the number of travellers hailing taxis at the airport; travellers' ultimate destinations; the number of days that the airport is operational; the availability and ease of alternative transportation modes at the airport; and the opportunity cost (i.e., other taxi trips missed) of drivers assigned to the airport. Given the many factors involved in setting the bid amount, this could easily cause ECI to underbid (thereby generating a loss as a result of getting the contract) or to overbid (and thereby risk not getting the contract at all). If possible, the assumptions should be verified before the bid is submitted.

- Obtaining the airport contract allows ECI to secure an additional, stable source of revenue, compared to having to compete for passengers in other areas of the city. However, it is unclear if airport-derived revenue would be greater or less than fares collected alternatively in the other areas of the city, especially since the average fare for the other areas of the city may change over the three-year period.
- The contract requires that ECI charge the average of the three winning companies' bids. As the bids from other companies may be much lower than ECI's bid, this is a significant risk; ECI would be forced to charge a lower amount, which will make the airport contract financially unfeasible. It is unclear whether the airport will do a "transfer" between the winning companies, such that the amount each company ends up getting is the bid amount. This will need to be clarified with the airport.
- Given that there are performance measures that ECI will need to comply with, it may result in additional costs to ECI, and/or may cause additional strain on resources in order for ECI to comply. This needs to be considered before a final decision can be made.

Overall, given the level of uncertainty surrounding the taxi business and the ultimate profitability of the airport bid for ECI, providing services to the airport under the current provisions of the contract may not be worthwhile. However, if ECI believes it is appropriate to pursue this contract in light of growing competition from ride-sharing services, a minimum bid price of \$26.97 is recommended. ECI should ensure that the average bid price is equal to or above its bid price before accepting the final contract.

For Assessment Opportunity #2 (Management Accounting), 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 analysis of the airport bid.

**Competent** – The candidate performs a reasonable qualitative analysis of the airport bid.

**Competent with distinction** – The candidate performs an in-depth qualitative analysis of the airport bid.

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

The candidate discusses the potential impairment of ECI's taxi licences.

The candidate demonstrates BREADTH or DEPTH in Core Financial Reporting.

CPA Map Technical Competency:		Core
1.2.2	Evaluates treatment for routine transactions	Α

## **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Jen wonders if ECI's licences are impaired. The market price has declined from a peak of \$100,000, and the purchase and sale of licences has stalled recently due to a lack of government action with respect to regulating ride-sharing services. Therefore, the ECI licences need to be assessed for impairment. Per ASPE 3064 Goodwill and intangible assets:

".64 An intangible asset that is subject to amortization shall be tested for impairment in accordance with the provisions of IMPAIRMENT OF LONG-LIVED ASSETS, Section 3063."

The licences are intangible assets that are being amortized over their useful life of 30 years. As such, their impairment needs to be assessed using the impairment test detailed in ASPE 3063:

"When to test for recoverability

- .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.
- .10 Examples of such events or changes in circumstances related to a long-lived asset include, but are not restricted to:
- (a) a significant decrease in its market price;"

The market price for licences was \$30,000 in early 2017, which is a decline from the peak price of \$100,000 several years prior to that. Purchases and sales of the licences have stalled in the market, presumably because sellers and buyers are unsure of their future value, since the Alberta government has yet to take action regarding ride-sharing services.

- "(b) a significant adverse change in the extent or manner in which it is being used or in its physical condition;
- (c) a significant adverse change in legal factors or in the business climate that could affect its value, including an adverse action or assessment by a regulator;"

The business climate has changed due to the presence of ride-sharing services. The Alberta government has been tolerating their operation, which is making a taxi licence less relevant.

- "(d) an accumulation of costs significantly in excess of the amount originally expected for its acquisition or construction;
- (e) a current-period operating or cash flow loss combined with a history of operating or cash flow losses, or a projection or forecast that demonstrates continuing losses associated with its use; or"

ECI has been operating in a loss position since inception and has forecast future losses until 2022.

"(f) a current expectation that, more likely than not, it will be sold or otherwise disposed of significantly before the end of its previously estimated useful life ("more likely than not" means a level of likelihood that is more than 50 percent)."

As a result of the above, we must test the licences for recoverability. Per ASPE 3063:

"Cash flow test for recoverability

.18 Estimates of future cash flows used to test the recoverability of a long-lived asset shall include only the future cash flows (cash inflows less associated cash outflows) that are directly associated with, and that are expected to arise as a direct result of, its use and eventual disposition. These cash flows include the principal amount of any liabilities included in the asset group, but not interest that will be recognized as an expense when incurred."

	2020	2021	2022	2023	2024
Cash inflows	\$11,900,000	\$12,600,000	\$13,400,000	\$14,200,000	\$15,000,000
Direct cash outflows Driver wages and vehicle					
operating costs	9,600,000	10,250,000	10,800,000	11,500,000	12,300,000
Direct net cash flow	\$ 2,300,000	\$ 2,350,000	\$ 2,600,000	\$ 2,700,000	\$ 2,700,000
Accumulated direct net					
cash flows	\$ 2,300,000	\$ 4,650,000	\$ 7,250,000	\$ 9,950,000	\$12,650,000

We have assumed cash flows from future disposition of the licences to be nil, as they would be used in ECI until expiry.

The licences have a current carrying value of \$4,050,000. Given that the accumulated undiscounted direct future cash flows will be above that amount by the end of 2021 (\$4,650,000), the licences' carrying amount appears to be recoverable.

Given that the licences appear recoverable, there is no need to continue the impairment test to see if their carrying value exceeds their fair value.

The taxi driver protests may influence the government of Alberta to act at some point against the ride-sharing service drivers. If this happens, the market value of the taxi licences may increase again, which would provide further confidence that the licences are not impaired. If the government of Alberta decides to take the opposite position and no longer necessitate a licence, the licences would at that point be worth \$0 and would need to be written off.

Because no adjustment is recommended at this time, ECI's debt-to-equity ratio (for its stand-alone statements or consolidated statements) is not impacted. Any impairment in the future would negatively affect the ratio, as it would reduce income and equity.

For Assessment Opportunity #3 (Financial Reporting), 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 of ECI's taxi licences.

**Competent** – The candidate provides a reasonable discussion of the potential impairment of ECI's taxi licences.

**Competent with distinction** – The candidate provides an in-depth discussion of the potential impairment of ECI's taxi licences.

# **Assessment Opportunity #4 (Common)**

The candidate discusses the accounting for ECI's investment in Ruby.

The candidate demonstrates BREADTH or DEPTH in Core Financial Reporting.

CPA Map T	CPA Map Technical Competencies:			
1.2.1	Develops or evaluates appropriate accounting policies and procedures	Α		
1.2.3	Evaluates treatment for non-routine transactions	В		

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

On November 1, 2019, ECI purchased 100% of the common shares of Ruby, making Ruby a subsidiary of ECI. *ASPE 1591 Subsidiaries* defines a "subsidiary" in paragraph .03:

- ".03 The following terms are used in this Section with the meanings specified:
- (a) A **subsidiary** is an enterprise controlled by another enterprise (the parent) that has the right and ability to obtain future economic benefits from the resources of the enterprise and is exposed to the related risks.
- (b) **Control** of an enterprise is the continuing power to determine its strategic operating, investing and financing policies without the co-operation of others."

Since ECI owns all of Ruby's voting interest, it is a clear indication that control exists, and that Ruby is a subsidiary of ECI.

ECI has currently recorded this investment at its cost of \$3.1 million on the balance sheet. ASPE 1591 states:

- ".24 An enterprise shall make an accounting policy choice to either:
- (a) consolidate its subsidiaries (see CONSOLIDATED FINANCIAL STATEMENTS, Section 1601); or
- (b) account for subsidiaries that it controls through:
  - (i) voting interests, potential voting interests, or a combination thereof, using the cost method (see paragraphs 1591.26A-.26B) or the equity method (see paragraph 1591.27);"

ECI therefore has the option to continue to record at cost, record using the equity method or to consolidate. As it may choose to use any of the three methods, we will determine which method has the preferred impact on ECI's debt-to-equity ratio. PFB has required non-consolidated financial statements but Jen is approaching the bank to see whether consolidated financial statements would be accepted.

The cost method relates to the stand-alone financial statements and has no impact on the debt-to-equity ratio, since the entry involves an increase of \$3.1 million in one asset (the investment), and a decrease of \$3.1 million in another asset (cash). As has already been done for 2019, dividends received will increase cash (an asset) and increase income (and therefore equity) for the year.

The equity method relates to the stand-alone financial statements and has a favourable impact on the debt-to-equity ratio; in addition to the entry above from the cost method, ECI also picks up its share of Ruby's income since acquisition, less any dividends. The investment account would increase by \$150,000 (\$250,000 - \$100,000) and an income account (and therefore equity) would increase by \$250,000, with the balance (the dividend received of \$100,000) increasing cash. This would lead to equity that is \$150,000 higher in 2019 than under the cost method, where only the dividend of \$100,000 was recorded in income. Because the fair value of all depreciable assets equals the book value, there are no additional adjustments required for any fair value differences of the assets. If it is determined that there are intangible assets acquired, then the value of the intangible asset and the related amortization of those assets would result in an adjustment.

If ECI chooses to consolidate, it would have consolidated financial statements. Ruby's assets, liabilities and income would be added to ECI's. Ruby's \$250,000 net income would increase the consolidated equity, but ECI's dividend income would be eliminated upon consolidation, reducing the consolidated equity. The impact on income under the consolidation method would be identical to the impact under the equity method. Therefore, there is a net effect of equity that is \$150,000 higher than under the cost method. This would seemingly help the debt-to-equity ratio; however, the addition of \$1,340,000 of mortgage payable to the consolidated liabilities would harm the ratio to a greater extent. The presence of goodwill and other assets on the balance sheet would not help, given that these are asset accounts and do not factor into the debt-to-equity ratio.

Therefore, it is recommended that ECI choose the equity method to account for its investment in Ruby, since it maximizes equity without increasing liabilities. It would not be beneficial for Jen to convince the bank to accept consolidated statements of ECI, given the impact on the debt-to-equity ratio.

For Assessment Opportunity #4 (Financial Reporting), 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 for the investment in Ruby.

**Competent** – The candidate provides a reasonable discussion of the accounting for the investment in Ruby.

**Competent with distinction** – The candidate provides an in-depth discussion of the accounting for the investment in Ruby and identifies its impact on the debt-to-equity ratio.

# **Assessment Opportunity #5 (Common)**

The candidate discusses the accounting for the electric car leases.

The candidate demonstrates BREADTH or DEPTH in Core Financial Reporting.

CPA Map Technical Competency:		Core
1.2.2	Evaluates treatment for routine transactions	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Ruby is planning to lease 120 electric cars for seven years. To determine if the lease is operating or capital, we must determine whether the criteria set out in *ASPE 3065 Leases*, paragraph .06 are met:

"From the point of view of a lessee, a lease normally transfers substantially all of the benefits and risks of ownership to the lessee when, at the inception of the lease, one or more of the following conditions are present:

- (a) There is reasonable assurance that the lessee will obtain ownership of the leased property by the end of the lease term. Reasonable assurance that the lessee will obtain ownership of the leased property is present when the terms of the lease result in ownership being transferred to the lessee by the end of the lease term or when the lease provides for a bargain purchase option.
- (b) The lease term is of such a duration that the lessee will receive substantially all of the economic benefits expected to be derived from the use of the leased property over its life span. Although the lease term may not be equal to the economic life of the leased property in terms of years, the lessee is normally expected to receive substantially all of the economic benefits to be derived from the leased property when the lease term is equal to a major portion (usually 75 percent or more) of the economic life of the leased property. This is due to the fact that new equipment, reflecting later technology and in prime condition, may be assumed to be more efficient than old equipment that has been subject to obsolescence and wear.
- (c) The lessor is assured of recovering the investment in the leased property and of earning a return on the investment as a result of the lease agreement. This condition exists if the present value, at the beginning of the lease term, of the minimum lease payments, excluding any portion thereof relating to executory costs, is equal to substantially all (usually 90 percent or more) of the fair value of the leased property, at the inception of the lease. In determining the present value, the discount rate used by the lessee is the lower of the lessee's rate for incremental borrowing and the interest rate implicit in the lease, if known."

Condition (a) is not met because there is no automatic transfer of ownership at the end of the lease, nor is there a bargain purchase option; the agreement stipulates that the cars could be bought at the end of the lease for their expected fair market value of \$5,000 each.

It is questionable whether condition (b) is met. The lease term is seven years. It can be determined from ECI's financial statements that it is amortizing its electric cars over a 10-year period. It is not clear whether the cars leased by Ruby will be the same as the cars purchased by ECI, but presumably the useful life of an electric car used for the same purpose in the two companies would be similar.

70% of the useful life of the vehicle is absorbed by the term of the lease (7-year lease term / 10-year useful life = 70%). This is less than the 75% guideline provided by the standard above. However, a 10-year useful life seems long for cars being used as extensively as taxis, which are used more than typical cars. If the useful life is even one year shorter (i.e., nine years), the lease term covers 78% of the useful life.

For condition (c), the current market price for the cars is \$40,000. The present value of the minimum lease payments, using 6% interest rate (which is Ruby's incremental borrowing rate, as the interest rate implicit in the lease is unknown) is:

N = 7 years × 12 months = 84 months I = 6%/12 months = 0.5%

PMT = \$500/month PV = \$34,227

\$34,227/\$40,000 = 85.6%. The present value of the lease payments accounts for 85.6% of the current fair value of the cars, which is less than the 90% threshold provided in the guidance above, so condition (c) is not met.

Given the information provided and the current estimated useful life, the lease is an operating lease. However, as the criteria are close to being met, our assumptions above should be confirmed. At the inception of the lease, this will be favourable for Ruby's debt-to-equity ratio, since the present value of the lease obligation ( $$34,227 \times 120 = $4.1 \text{ million}$ ) does not need to be recorded as a liability on its books.

If the bank is willing to accept ECI's consolidated financial statements, there would be the same impacts on the debt-to-equity ratio.

For Assessment Opportunity #5 (Financial Reporting), 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 for the lease.

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

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

# **Assessment Opportunity #6 (Common)**

The candidate discusses the accounting for the convertible debt.

The candidate demonstrates BREADTH or DEPTH in Core Financial Reporting.

CPA Map Te	CPA Map Technical Competencies:		
1.2.1	Develops or evaluates appropriate accounting policies and procedures	Α	
1.2.3	Evaluates treatment for non-routine transactions	В	

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Ruby plans to purchase 80 electric limousine taxis, using convertible debt provided by the Environmental Advantages Fund.

The loan is a convertible debt instrument. Because the conversion feature is economically equivalent to a warrant that would be classified as an equity instrument if it were issued separately, the loan has both a debt and an equity component. Under ASPE 3856 Financial instruments, an equity instrument is defined as "any contract that evidences a residual interest in the assets of an enterprise after deducting all of its liabilities." A warrant generates no obligation to deliver cash or any other financial asset, or to exchange financial assets or liabilities in unfavourable conditions. Since the convertible feature is defined through a fixed number of Ruby's shares (1 million shares), it cannot be classified as a financial liability, and therefore evidences an interest in the entity's net assets.

Under ASPE 3856, choices exist for the presentation of this type of debt:

- ".20 Except as provided in paragraphs 3856.23, the issuer of a financial instrument shall classify the instrument, or its component parts, as a liability or as equity in accordance with the substance of the contractual arrangement on initial recognition and the definitions of a financial liability and an equity instrument. (Paragraphs 3856.A22-.A38 provide related application guidance.)
- .21 The issuer of a financial instrument that contains both a liability and an equity element, including warrants or options issued with and detachable from a financial liability, shall classify the instrument's component parts separately in accordance with paragraph 3856.20. (Paragraphs 3856.A30-.A38 provide related application guidance.)

- .22 Acceptable methods for initial measurement of the separate liability and equity elements of an instrument issued in an arm's length transaction to which paragraph 3856.21 applies include the following:
- (a) The equity component is measured as zero. The entire proceeds of the issue are allocated to the liability component.
- (b) The less easily measurable component is allocated the residual amount after deducting from the entire proceeds of the issue the amount separately determined for the component that is more easily measurable."

Thus, Ruby could present the equity component at \$0, and present the liability portion at \$4 million ( $80 \times \$50,000$ ), or it could measure the liability component at the present value of the future cash outflows required, using a discount rate equal to the required market rate of return of a similar debt instrument that would not incorporate a convertibility feature, with the residual amount being presented as equity. The liability component is the more easily measurable, given that the market rate of interest for similar debt without the conversion option is known, and because Ruby is a private company, making the value of the equity component difficult to value.

The liability component could be valued as follows:

```
N = 5
I = 6\%
PMT = $4,000,000 \times 4\% = $160,000
FV = $4,000,000
PV = $3,663,011
```

Therefore, the equity component would be valued at \$336,989 (\$4 million - \$3,663,011).

While option (a) is simpler, the compliance with the required debt-to-equity ratio would benefit from treatment (b), as it results in a smaller increase of the debt balance and increases the equity balance. As such, it is recommended that Ruby use treatment (b).

If the bank is willing to accept ECI's consolidated financial statements, there would be the same impacts on the debt-to-equity ratio.

For Assessment Opportunity #6 (Financial Reporting), 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 for the convertible debt.

**Competent** – The candidate provides a reasonable discussion of the accounting for the convertible debt.

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

# DAY 2 – MARKING GUIDE – ASSURANCE ROLE ENVIROCAB INC. (ECI)

In the Assurance role, the candidate is expected to discuss the appropriate accounting for the stock options and stock appreciation rights granted to ECI's drivers and make a supported recommendation on which one to choose. The candidate should provide review comments for the deficiencies found in François's work related to the audit plan and the procedures performed over accounts receivable and property, plant and equipment. The candidate should also recommend audit procedures for the financial reporting issues that Jason asked CPA to address, and discuss the internal control weaknesses in the royalty revenue process. Finally, the candidate should address the audit procedures that would be performed for the Calgary airport contract, should ECI be one of the successful bidders, and discuss the possible reliance on the QC team's work by the external auditors.

# See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

To: Jen Toy From: CPA

Subject: ECI requests

# **Assessment Opportunity #7**

The candidate discusses the appropriate accounting for the stock options and stock appreciation rights granted to ECI's drivers, and recommends which instrument to grant in the future.

The candidate demonstrates DEPTH in the Assurance role.

•	echnical Competency: comp map is 2019 modified, i.e., DAIS and GST/HST are not testable)	Core	E3 AS
1.2.3	Evaluates treatment for non-routine transactions	В	A
1.2.4	Analyzes treatment for complex events or transactions	С	В

### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

# **Stock Options**

To account for the stock options granted to ECI's drivers, it is necessary to consult the guidance provided in ASPE 3870 Stock-Based Compensation and Other Stock-Based Payments:

- ".24 Equity instruments awarded to employees and the cost of the services rendered as consideration shall be measured and recognized based on the fair value of the equity instruments.
- .30 The objective of the measurement process is to estimate the fair value, based on the stock price at the grant date, of stock options or other equity instruments to which employees become entitled when they have rendered the requisite service and satisfied any other conditions necessary to earn the right to benefit from the instruments (for example, to exercise stock options or to sell shares of stock).
- .34 The fair value of an option estimated at the grant date is not subsequently adjusted for changes in the price of the underlying stock or its volatility, the life of the option, dividends on the stock, or the risk-free interest rate."

Therefore, on January 2, 2019, when 90 (60% of 150) of ECl's drivers were each granted 1,000 stock options, with a fair value of 0.35 each, to purchase one ECl common share per option, the transaction should initially be measured at 0.35 (90 drivers 0.35 per option).

Additionally, paragraph .48 requires: "The compensation cost of a stock-based award to employees shall be recognized over the period in which the related employee services are rendered, by a charge to compensation cost if the award is for future service." In the absence of the information needed to reduce the compensation expense for any options not expected to vest, the \$31,500 compensation expense would be recognized in the amount of \$6,300 per year (\$31,500/5 years), beginning with the year ended December 31, 2019, when the first year of the vesting requirement has been satisfied.

Before finalizing the amount to be recorded, however, it is necessary to consider paragraph .46, which states:

"At the grant date, an enterprise may choose to base accruals of compensation cost on the best available estimate of the number of options or other equity instruments that are expected to vest and to revise that estimate if subsequent information indicates that actual forfeitures are likely to differ from initial estimates. Alternatively, an enterprise may begin accruing compensation cost as if all instruments granted that are subject only to a service requirement are expected to vest. The effect of actual forfeitures would then be recognized as they occur."

In this case, Jen estimates that only 80% of the options will vest because she estimates that 20% of the drivers will not stay with ECI long enough to acquire the rights to the options. ECI could therefore choose to incorporate this element in the calculation of the 2019 expense, and reduce the expense and the credit to contributed surplus to \$5,040 (instead of \$6,300), to consider the expected rights that will expire without vesting. ECI could also choose to set up the full amount of \$6,300 in 2019, and consider the non-vesting rights as they materialize in future years by a downward adjustment to the compensation expense and equity account.

The subsequent changes in the fair value of the options or the shares have no impact on the financial statements.

Since the options represent an equity instrument, and do not obligate ECI to pay out any amount of cash (or other financial asset), no liability is to be accounted for. The offsetting credit is to contributed surplus, an equity account on the balance sheet. Given that the increase in the compensation expense will decrease shareholder's equity and will be offset by the credit to contributed surplus, which is also a component of shareholder's equity, there will be no impact on the debt-to-equity ratio. If and when the employees exercise the options, the credit in contributed surplus would be reclassified to share capital.

# **Stock Appreciation Rights**

The following paragraphs of ASPE 3870 apply to stock appreciation rights awarded to drivers:

".37 For awards (including modifications to awards) that call for settlement in cash or other assets, including stock appreciation rights, an enterprise shall measure compensation cost as the amount by which the quoted market value of the shares of the enterprise's stock covered by the grant exceeds the option price or value specified, by reference to a market price or otherwise, subject to any appreciation limitations under the plan. Changes, either increases or decreases, in the quoted market value of those shares between the date of grant and the measurement date result in a change in the measure of compensation for the right or award. Compensation cost accrued during the service period shall not be adjusted below zero. The offsetting adjustment shall be to compensation cost of the period in which changes in the market value occur. The accrued compensation for a right that is forfeited or cancelled shall be adjusted by decreasing compensation cost in the period of forfeiture.

.38 An award of stock appreciation rights that calls for settlement in cash is an indexed liability, and the measurement date is the settlement (exercise) date because that is consistent with accounting for similar liabilities."

For the 60 drivers (40% of 150) who selected the stock appreciation rights, the recognition of the compensation expense and corresponding liability will be based on:

- the difference between the estimated fair value of the shares and the benchmark share price of \$1; and
- the vesting period.

When the rights were granted on January 2, 2019, ECl's shares were valued at an estimated \$1 per share, which is the same as the benchmark. In addition, none of the rights have vested yet. Therefore, there is no expense at the issuance date of the rights. As for the change in the value of ECl's shares that happened in 2019, it must also be taken into account in measuring the expense and the liability on ECl's 2019 financial statements. Since the shares at year end are worth an estimated \$1.50, the 60,000 rights (60 drivers × 1,000 rights each) are now worth \$0.50 each, for a total of \$30,000. Since one-fifth of the vesting time has elapsed in 2019, the cost for the year is \$6,000 (20% × \$30,000). As mentioned above for the stock options, ECl could choose to reduce the cost by accruing for the projected 20% forfeitures of rights estimated by the controller. If ECl opts to accrue immediately for the estimated forfeitures of rights, the cost and the liability to set up could be reduced to \$4,800 (80% × \$6,000). As it would reduce the unfavourable impact on the debt-to-equity ratio, this choice is recommended.

At each reporting date, the liability must be re-evaluated on the basis of the intrinsic value of the rights, with a corresponding impact on the compensation expense. For each of the next four years (2020 to 2023), the cumulative amount equal to the number of years since the grant date / 5 years x the year-end value of the rights, less amounts already recognized in previous reporting periods, must also be recognized as a cost, and added to the liability.

As can be seen above, the issuance of stock appreciation rights has a detrimental impact on the debt-to-equity ratio, which the stock options do not have. Furthermore, their presence makes the net income more unpredictable as the amount to be recorded is influenced by the value of the company's shares, which can fluctuate. We therefore recommend that, in the future, ECI grant stock options rather than stock appreciation rights. Given the higher percentage of drivers choosing stock options, this is also what ECI's drivers seem to prefer.

For Assessment Opportunity #7 (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 financial accounting for the stock options and the stock appreciation rights.

**Competent** – The candidate discusses the financial accounting for the stock options or the stock appreciation rights, and provides a supported conclusion.

**Competent with distinction** – The candidate discusses the financial accounting for the stock options and the stock appreciation rights, and recommends which instrument to grant in the future.

# **Assessment Opportunity #8**

The candidate provides review comments on the audit planning performed by François.

The candidate demonstrates DEPTH in the Assurance role.

CPA Map Technical Competencies:			E3 AS
4.3.4	Assesses materiality for the assurance engagement or project	В	Α
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	В	А
4.3.6	Develops appropriate procedures, including Audit Data Analytics (ADA), based on the identified risk of material misstatement	В	Α

## **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.4.3 Considers alternative interpretations of quantitative and qualitative information.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.5.2 Determines whether the information collected and the work performed are sufficient to support conclusions.

#### **Financial Statement Level Risk**

When assessing financial statement level risk, François was correct to consider Jen's business experience, the nature of the taxi business and the complexity associated with accounting for the acquisition of Ruby. However, there were several important risk factors that were not considered in the assessment, including the following:

- Although the nature of the taxi business is generally straightforward, ECI has a different business model because of its focus on the environment and its employment of its drivers. These factors, combined with increased competition from ride-sharing apps, have resulted in ECI not yet being profitable. As a result, there may be a bias to select the accounting treatments most favourable to ECI, to attract additional investment.
- PFB has subjected ECI to a debt-to-equity ratio requirement. This could bias ECI in the
  selection of inappropriate accounting treatments, especially since failure to satisfy the
  covenant could result in the bank requiring immediate repayment of the loan. Although Jen
  and the angel investors have indicated their willingness to inject additional money as needed
  to continue to support ECI, it is likely that they would prefer to avoid a requirement to do so.
- This is the first year in which ECI's financial statements will be subject to audit. Without scrutiny
  of its prior year financial statements, it is possible that ECI has selected inappropriate
  accounting policies or has incorrectly applied the accounting policies, resulting in errors in the
  financial statements. There is also an increased risk that the opening balances may contain
  errors.
- There are accounting errors found in the financial statements (e.g., the accounting for stock options and stock appreciation rights). This increases the risk that there are other undetected errors in the financial statements.
- There are additional complex transactions not considered by François. For example, the taxi licences need to be tested for impairment in the current year. As accounting staff may be unfamiliar with how to account for them, these complex transactions increase risk.

As a result, the risk of material misstatement at the financial statement level should have been assessed as high rather than moderate.

# Materiality

François erred in linking materiality to his assessment of the risk of material misstatement. Instead, CAS 320 Materiality in Planning and Performing an Audit requires that materiality be determined based on the needs of the financial statement users. Jen will use the financial statements to assess ECI's performance and determine when to proceed with Step 3, and therefore will be most interested in ECI's net income (loss). PFB will also be relying on ECI's financial statements, to assess its ability to repay and its compliance with the debt-to-equity ratio requirement. As such, it will be interested in ECI's net income (loss), debt and equity balances. The silent angel investors will use the financial statements to assess the performance of ECI and their return on investment, and therefore would also be interested in ECI's net income (loss). Finally, the drivers of ECI would likely be using the financial statements to assess the value of their stock compensation package, and would be interested in ECI's net income (loss), as that would be the main driver of ECI's share value.

Given the users' needs, François's choice of benchmark (income before taxes) on which to calculate materiality would have been appropriate if ECI had not incurred a loss before taxes for the year ended December 31, 2019. As a result, it will be necessary to choose another benchmark. Given that revenues are a good proxy for a company's financial performance, I recommend calculating materiality based on revenues.

Fare revenue for 2019 is \$11,250,000. There are no financial reporting issues identified that would require an adjustment to the revenue amount. The typical range for materiality based on revenue is 0.5% to 2%. Considering the users' sensitivity to error, I would choose 0.5%. This results in materiality of \$56,250 (\$11,250,000 × 0.005), or approximately \$56,000.

In addition to calculating materiality, CAS 320 requires that the external auditor calculate performance materiality, which François did not do. This is an amount less than materiality, which is set by the auditor to reduce the likelihood that any uncorrected and undetected misstatements within a class of transactions, account balances or disclosures, in aggregate, do not exceed overall materiality. While performance materiality is a matter of professional judgement, the *Professional Engagement Guide* suggests a range of 60% to 85% of overall materiality would be appropriate. Therefore, given the high financial statement level risk, the external auditor is likely to calculate performance materiality at \$33,600, or 60% of the revised materiality calculated above.

# **Audit Approach**

The fact that the external auditor will be auditing ECl's financial statements for the first time is not sufficient justification for the adoption of a substantive audit approach. Rather, the audit approach should be based on an assessment of ECl's internal controls. Given that the QC team has audited, and found no deficiencies regarding the internal controls intended to mitigate the significant risks related to ECl's operations, it would appear that ECl has adequate controls and a combined audit approach would be more appropriate.

In addition, the auditors will need to perform work on the opening balances. Given that ECI has no inventory (which would typically be a difficult account balance for verifying the opening balance), the auditor should be able to obtain sufficient appropriate audit evidence for ECI's balance sheet accounts (e.g., cash can be easily confirmed through a bank confirmation, PP&E can be verified through a count and roll-back procedures). However, if for any reason the auditor is unable to obtain sufficient audit evidence for certain opening balances, this may lead to a modified audit opinion for the first-year audit.

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 discusses some of the deficiencies in the audit planning performed by François.

**Competent** – The candidate discusses several of the deficiencies in the audit planning performed by François.

**Competent with distinction** – The candidate discusses most of the deficiencies in the audit planning performed by François.

# **Assessment Opportunity #9**

The candidate recommends audit procedures for the ECI and Ruby financial reporting issues identified by Jason.

The candidate demonstrates DEPTH in the Assurance role.

СРА Мар	Technical Competency:	Core	E3 AS
4.3.6	Develops appropriate procedures, including Audit Data Analytics (ADA), based on the identified risk of material misstatement	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.5.2 Determines whether the information collected and the work performed are sufficient to support conclusions.

# **Audit Procedures for Financial Reporting Issues Identified**

The QC team should plan to perform the following audit procedures related to the areas identified.

# Taxi licences:

- Read media coverage, legislation and administrative policies pertaining to ride-sharing services in Alberta, to develop an understanding of the potential impacts on the fair value of taxi licences. Discuss with the taxi industry association the impact of ride sharing on the fair value of taxi licences in Alberta.
- Evaluate management's projections of the undiscounted future net cash flows to be generated
  from taxi licences by comparing them with the historical net cash flows generated by ECI,
  discuss with management any changes in ECI's operations during the period of the projections,
  and assess the reasonability of the assumptions used, based on predicted industry information
  from the taxi industry association.
- Re-perform the comparison of the carrying amount of the taxi licences with the total undiscounted future net cash flows to be generated from the taxi licences.

#### Investment in Ruby:

- Review the agreement for the purchase of 100% of the voting shares of Ruby, as well as the
  purchase price, to develop an understanding of the purchase and ensure the existence of the
  investment, and that it was valued appropriately on the acquisition date.
- Review the valuator report that ECI obtained related to the purchase, to confirm that there are
  no fair value differences on the assets acquired, other than land. Assess the assumptions used
  (e.g., discount rates) by comparing them to market information, if available. Also assess the
  qualification of the independent appraiser by reviewing whether they have any designations,
  etc.
- Given the recommendation to account for the investment in Ruby using the equity method, obtain Ruby's income statement for the period from November 1 to December 31, 2019, to verify the \$250,000 added to the investment account and the \$250,000 recognized as investment income.
- Read the minutes of meetings, if any, to verify that the \$100,000 dividend was declared.

#### Lease:

- Review the lease agreement to develop an understanding of the terms and conditions. In particular, it will be necessary to verify that Ruby does not take ownership of the vehicles.
- Assess whether the \$5,000 at which the leased vehicles can be purchased at the end of the lease term represents fair value by comparing this amount to resale prices from auction houses, websites and dealerships that sell used electric vehicles.
- Examine statistics about the useful life of taxis to assess the reasonability of the ten years used by Ruby. These statistics could be obtained from dealerships that sell used vehicles, the taxi industry association, etc. This would allow the team to ensure that Ruby's liabilities are complete; a shorter useful life may mean that the criterion involving a comparison of the useful life with the term of the lease could be met, in which case there would be a capital lease.
- Assess the reasonability of the interest rate used to calculate the present value of the minimum lease payments by comparing them with: bank rates for the vehicle financing, if the incremental borrowing rate was used; or the amount stated in the lease, if the interest rate implicit in the lease was known.
- Re-perform the calculations and comparison of the present value of the minimum lease payments to the fair value of the leased vehicles, to assess whether this criterion has been satisfied, to ensure that the lease is an operating lease, and that no lease liability is to be recognized and ECI's liabilities are complete.

# Convertible debt:

- Review the documentation regarding the convertible debt, to develop an understanding of the terms and conditions. In particular, it will be necessary to determine if there is a conversion clause.
- Since a recommendation was made to bifurcate the instrument into its debt and equity components, assess the reasonability of the interest rate by comparing the rate with that of debt with similar terms and conditions but lacking the conversion option.
- Re-perform the calculation of the present value of the future cash outflows required associated with the instrument, to determine the completeness, accuracy and classification of the amount allocated to the debt component. Similarly, recalculate the residual allocated to the equity component.

### Stock compensation packages:

- Review the documentation regarding the stock options and stock appreciation rights granted
  to ECI's drivers, including the minutes of any meetings in which the compensation packages
  were approved, if available, to develop an understanding of the terms and conditions (e.g.,
  share options exercise price and stock appreciation rights benchmark price), and ensure that
  they have been accounted for correctly.
- Agree the share price on the grant date to supporting documentation, such as a company valuation report, as this amount is critical to the valuation of both the stock options and the stock appreciation rights. For stock appreciation rights, the share price at year end should also be verified.

- For stock options, assess the reasonability of the other inputs into the Black Scholes model (exercise price of the options, time to expiration, risk free rate and volatility). Specifically:
  - the exercise price and time to expiration should be agreed to the details documented in any available meeting minutes.
  - the risk-free rate should be agreed to the rate paid on treasury bills issued by the Government of Canada.
  - the volatility should be vouched to any expert valuator report, if available. If not, the auditors
    may need to engage an external expert to determine this value, as volatility for private
    companies would be difficult to determine.
  - re-perform the calculation of the fair value of the options on the grant date, to ensure the accuracy of the total compensation expense to be recognized over the five-year vesting period.
- Obtain human resource records to verify the number of drivers employed by ECI on the grant
  date and, should a decision be made to reduce the compensation expense for stock options
  and stock appreciation rights not expected to vest, review records regarding historical turnover
  rates for drivers, to ensure the completeness and accuracy of the compensation expense to
  be recognized.
- Re-perform the calculation of the compensation expense to be recognized for the year ended December 31, 2019, to ensure its accuracy.

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 discusses some audit procedures that the QC team can perform for ECI's and Ruby's financial reporting issues.

**Competent** – The candidate discusses several audit procedures that the QC team can perform for ECI's and Ruby's financial reporting issues.

**Competent with distinction** – The candidate discusses many audit procedures that the QC team can perform for ECI's and Ruby's financial reporting issues.

# **Assessment Opportunity #10**

The candidate provides review comments on the audit work performed by François on accounts receivable and property, plant and equipment.

The candidate demonstrates DEPTH in the Assurance role.

CPA Map T	CPA Map Technical Competencies:			
4.3.6	Develops appropriate procedures, including Audit Data Analytics (ADA), based on the identified risk of material misstatement	В	Α	
4.3.7	Performs the work plan	В	Α	

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.2.3 Verifies/corroborates/tests information and evaluates the quality of information sources, as needed, to satisfy the purpose of the analysis.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.3.7 Considers whether data are sufficiently complete, valid, and reliable for the purpose of the analysis.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.3 Considers alternative interpretations of quantitative and qualitative information.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.5.2 Determines whether the information collected and the work performed are sufficient to support conclusions.

### **Audit Procedures Performed by François**

There are many deficiencies in the audit procedures that François has performed with respect to ECI's accounts receivable and property, plant and equipment.

# Accounts receivable:

Given that it is material, François has not gathered sufficient appropriate audit evidence for the accounts receivable balance. The fact that it has only decreased by 1% from the prior year is not a valid reason for not performing work on the balance. The additional procedures that François should have performed include the following:

François should have footed the aged accounts receivable listing and compared a sample of
the driver balances from the accounts receivable subledger to ECI's records, to ensure the
accuracy of this account balance. In addition, the accounts receivable aging in the subledger
should be tested by selecting a sample and determining the number of days owing, by
reviewing the related supporting documentation and recalculating the number of days to year
end.

- François should have confirmed a sample of the outstanding balances with the drivers, to establish the existence of the accounts receivable.
- Additionally, François should have tested subsequent receipts by selecting a sample of outstanding accounts receivable from the subledger and tracing the subsequent payment after year end to the bank statement or deposit slip.
- The allowance for doubtful accounts balance should be compared to the amount outstanding greater than 90 days per the accounts receivable subledger, to determine whether the allowance recorded is sufficient. The allowance balance should also be compared to the prior year, to ensure reasonableness. François should have reviewed the process that ECI followed to determine last year's allowance for doubtful accounts and ensure consistency, or if there is a change, discuss with management why there was the change.
- The balance of accounts receivable has only decreased by approximately 1% between December 31, 2018, and December 31, 2019. This decrease is inconsistent with ECI's fare revenue, which has increased by approximately 13%. Normally, there is a correlation between these two account balance variances. This may mean that the accounts receivable balance is not complete. François should have discussed with Jen the possible reasons for the accounts receivable balance being similar to the prior year, and corroborate that explanation with supporting documentation.

### Property, plant and equipment:

Throughout his work on property, plant and equipment, François appears to have relied excessively on management representations and evidence provided by management. As a result, it is questionable whether sufficient appropriate audit evidence has been gathered. Inquiry with management alone is not adequate in order to reduce the audit risk to an appropriately low level. The additional procedures François should have performed include the following:

- After footing and cross footing the cost, accumulated depreciation and net book value columns on his working paper, François should have agreed the balances to the general ledger accounts and to the financial statement balance and notes, to ensure their accuracy. As a result of not doing so, François did not recognize that there is a discrepancy in the cost of the vehicles, according to the working paper and Note 1 to the financial statements. François needs to determine the cause of the discrepancy by discussing with management and obtaining supporting documentation, after which the balance in error should be corrected.
- The purchase of the two vehicles should have been agreed to the original purchase agreements rather than confirmed through discussions with management. Given that the average purchase price of the two vehicles appears to have been \$100,000 each (\$200,000/2), which is significantly higher than the other information provided about the purchase price of electric vehicles, he should have been more skeptical. Also, as the QC team was not provided with any other information to suggest that additional vehicles were purchased during the year ended December 31, 2019, this increase is a concern. If additional vehicles were purchased, additional licences were likely also purchased, but the cost of ECI's licences has not increased from the prior year. To verify the existence of these two additional vehicles and also the accuracy of ECI's property, plant and equipment and licence balances, follow up is necessary.

- Regarding the office equipment, although the increase is less than materiality and may have been appropriate, François could have agreed the addition to the original purchase documentation, given that there was only one transaction.
- In addition to these specific concerns, François did not attempt to verify the existence of any of ECI's property, plant and equipment assets. Since drivers return their cars at the end of each shift, it should have been possible for François to perform a count for all vehicles, other than those that remain on the roads overnight. For the vehicles not counted, François could ensure that the vehicles are listed on ECI's insurance policy, as it is unlikely that ECI would insure vehicles that do not exist. Additionally, François should have determined that ECI has the rights to the vehicles by inspecting a sample of registration documents, to confirm that the vehicles are owned by ECI rather than by its drivers.
- François has recalculated accumulated depreciation but does not appear to have audited
  whether the useful lives on which the accumulated depreciation would be based is still
  appropriate. François should have discussed the estimated useful lives with management and
  determined whether there are any factors, such as technological advances, that would cause
  the useful lives to change in the current year.
- François does not appear to have performed any impairment procedures. François should have discussed with management and reviewed relevant documentation (e.g., management meeting minutes, industry/regulatory information about the electric car market), to determine whether there are any indicators of impairment. François should also inspect the assets (e.g., go to where the taxis are parked overnight) and determine whether there are any signs of obsolescence. If indicators of impairment exist, the undiscounted cash flow related to the assets would have to be obtained, to determine whether the carrying amount is recoverable.

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 discusses some of the deficiencies in the audit work performed by François.

**Competent** – The candidate discusses several of the deficiencies in the audit work performed by François.

**Competent with distinction** – The candidate discusses most of the deficiencies in the audit work performed by François.

# **Assessment Opportunity #11**

The candidate discusses how the Ruby drivers may not be paying the full amount of royalties owed, and recommends internal controls that should be in place.

The candidate demonstrates DEPTH in the Assurance role.

CPA Map Technical Competencies:		Core	E3 AS
4.1.1	Assesses the entity's risk assessment processes	Α	Α
4.1.2	Evaluates the information system, including the related processes, using knowledge of data requirements and risk exposures	В	Α

## **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Given Ruby's business model, in which its drivers provide their own meters, Jason is right to be concerned that the drivers with whom it has contracted will not remit the required 7.5% royalty on all fares, and that the completeness of Ruby's royalty revenue is therefore at risk.

#### **Drivers with Manual Meters**

For drivers with manual meters, they could:

- not use a meter at all for the trip, accept payment, and not record it on the trip log.
- use the meter, accept payment, and not record it on the trip log.
- record a trip on the trip log but write down an amount lower than the actual fare.
- make unintentional errors while recording trips on the trip log.

All of the above would result in the underreporting of trips and royalty revenue.

## <u>Internal controls to be implemented:</u>

- Ruby should investigate whether it is possible to modify the meters so that a receipt is automatically printed and a record of the fare transmitted to Ruby, similar to what is already done with the more sophisticated meters.
- If modifying meters is not possible, there should be a system in place to ensure that receipts are issued for every trip, and a copy of those receipts are provided to Ruby. For example, there could be signage in all vehicles and in Ruby's advertisements, indicating that passengers can expect to receive a receipt from the driver. The receipt should include a link to a passenger satisfaction survey. Passengers should be provided with an incentive to complete the survey, such as a contest to win free taxi service for a year. This will serve to encourage all passengers to ask for a receipt, and for drivers to have to issue receipts, thereby reducing the risk that royalty revenue is underreported. In addition, although not standard practice for the taxi industry, any manually issued receipts should be pre-numbered. The receipts should have a duplicate copy that is generated for submission to Ruby, along with royalties. This would allow Ruby to account for the numerical sequence of the receipts, to ensure that the royalty revenue is complete. Additionally, on a random basis, similar to "secret shoppers," passengers could be used to ensure that receipts are being issued at all times.
- Ruby should perform a reasonability analysis by calculating the royalty revenue related to trips arranged through Ruby's dispatch centre, based on the number of trips, average distance and fare and the 7.5% royalty rate, and comparing this with 80% of the royalty revenues remitted by the drivers.
- Ruby could also compare each individual driver's remittance per hour worked to the company average. This could identify "outliers," for whom additional followup would be required.

These are some of the steps that can be taken to address the concerns over the completeness of Ruby's royalty revenue. If a decision is made to proceed with Step 3, you should ensure that, when new meters need to be purchased, they are purchased by ECI and include the features recommended above, to reduce the risk that royalty revenue is incomplete.

#### **Drivers with Automated Meters**

For the drivers who have meters that print receipts automatically and transmit fare details to Ruby electronically, the risk of underreported revenues/royalties is reduced. However, the meter could possibly be disabled, such that not all trips are transmitted, thereby allowing the driver to pocket the full fare and not remit the required royalty to Ruby.

# <u>Internal controls to be implemented:</u>

- All of the internal controls suggested under the manual meters section would also be effective
  in addressing the risk that the automated meters could be disabled.
- In addition, "secret shoppers" could be used to ask the driver to pay cash and not to engage the meter, to determine whether any drivers are doing this.

# **Cheques from Drivers**

Ruby allows its drivers to remit royalty revenue by cash or cheque delivered to Ruby's office, or by EFT. Allowing remittances by cheque has resulted in several instances in which the cheques written by drivers have not cleared the bank due to insufficient funds. Ruby could be receiving less royalties due to drivers purposely sending a cheque with insufficient funds in their account, or a driver could pay their last royalty payment by cheque before quitting, and then cancel the cheque.

# Internal controls to be implemented:

- Ruby should consider requiring that all drivers make all remittances by EFT, especially as it is
  likely that Ruby's accountant does not have the time to follow up with the drivers to obtain
  replacement cheques. Given that the bank fees associated with EFTs are a concern for drivers,
  drivers could be reimbursed for these fees. The other advantage of requiring that all
  remittances be made by EFT is that late payments should be reduced; drivers will not need to
  attend Ruby's office during business hours to make remittances.
- Alternatively, Ruby could require an initial deposit from the drivers who want to pay by cheque, which is held by Ruby and could cover any instances of insufficient funds.

# **Accounts Receivable Followup**

Ruby's accountant does not have time to follow up on outstanding amounts. As a result, there have been instances in which remittances have been late, or have not been made prior to a driver leaving Ruby, necessitating writing off the royalty receivable. This negatively impacts Ruby's royalties received; while some amounts may end up being collected upon followup, this is currently not being done and Ruby is therefore not receiving these amounts.

# <u>Internal controls to be implemented:</u>

- Since Ruby's accountant does not have time to pursue outstanding accounts for non-payment, Ruby could consider hiring another accountant or could request assistance from ECI, should its accounting department have the capacity to do so.
- Ruby could consider implementing penalties for drivers whose accounts receivables are overdue, such as removing their access to dispatch calls.

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 discusses how the Ruby drivers may not be paying the full amount of royalties owed, or makes some recommendations on the internal controls that should be in place.

**Competent** – The candidate discusses how the Ruby drivers may not be paying the full amount of royalties owed, and makes some recommendations on the internal controls that should be in place.

**Competent with distinction** – The candidate discusses how the Ruby drivers may not be paying the full amount of royalties owed, and makes several recommendations on the internal controls that should be in place.

# **Assessment Opportunity #12**

The candidate describes the procedures that an external auditor would perform to satisfy the requirements of the airport contract.

The candidate demonstrates DEPTH in the Assurance role.

СРА Мар Т	echnical Competency:	Core	E3 AS
4.3.6	Develops appropriate procedures, including Audit Data Analytics (ADA), based on the identified risk of material misstatement	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.5.2 Determines whether the information collected and the work performed are sufficient to support conclusions.

Should ECI be the successful bidder for the Calgary airport contract, the company will be required to provide the Calgary Airport Authority with an audit-level *CSAE 3530 Attestation Engagement to Report on Compliance* report from an independent auditor, supporting the company's statement of compliance with the performance measures. In order for the external auditor to do so, the following procedures could be performed:

- A minimum of 20 taxis must be located on the airport premises from 6:00 am to midnight:
  - The external auditor could make unannounced visits to the airport and count the number of taxis located in both taxi parking and the arrivals area, to ensure that the company has the required number of taxis located on the airport premises.
  - The auditor could also check dispatch logs, if available, on a sample basis, to ensure that the correct number of taxis are at the airport.
- The company must charge passengers the agreed-upon fare:
  - Since ECI taxi meters provide electronic receipts, the auditor could obtain electronic records and use computer-assisted audit techniques to identify any exceptions to the agreed-upon fare. In order for this procedure to be effective, it would be necessary for the receipts to itemize the fare versus tip.
- All vehicles must be insured against property and casualty losses with liability coverage for passenger injuries of no less than \$5 million per occurrence:
  - The external auditor could request a copy of ECI's insurance policy, preferably directly from ECI's insurer or insurance broker. The continuity schedule for ECI's property, plant and equipment could then be agreed to the insured vehicles on the policy and the external auditor could verify that the policy includes a limit of no less than \$5 million per occurrence for liability for passenger injuries.
- All vehicles must pass a 100-point safety inspection on a quarterly basis:
  - If ECI outsources the servicing of its vehicles, the external auditor could contact the garage or garages that service ECI's fleet to obtain the inspection reports. The reports should be compared to the vehicle listings used in the previous procedures, and the results of the inspections examined, to ensure that each vehicle has passed. If ECI performs inspections internally, the external auditor would ask for proof of inspections, such as a checklist signed by the mechanic, for the vehicles. A sample should be selected for each quarter of the year.
- No more than 5% of trips can result in passenger complaints regarding the vehicle's condition, the manner in which it is driven or the driver's conduct toward their passengers:
  - The external auditor could obtain management's records of the number of airport trips and assess the reasonability of the number based on the surprise airport visits performed as part of their other procedures. The external auditor could obtain records of the number of complaints (regarding vehicle condition, manner in which it is driven and driver conduct) received by the company. It may also be necessary to contact the regulatory body that oversees the company's operations and request the number of vehicle safety complaints it has received, as it is possible that the complaints would be reported directly to that body rather than to the company itself. The external auditor could also perform an online search of the company, to determine if there are any news reports of safety complaints. The external auditor would then perform a calculation of the number of complaints relative to the number of fares, and compare to the performance metric.

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 describes some procedures that the external auditor would perform to satisfy the requirements of the airport contract.

**Competent** – The candidate describes several procedures that the external auditor would perform to satisfy the requirements of the airport contract.

**Competent with distinction** – The candidate describes many procedures that the external auditor would perform to satisfy the requirements of the airport contract.

# **Assessment Opportunity #13**

The candidate discusses whether an external auditor would be able to rely on the work of the QC team and makes recommendations regarding the team to ensure that reliance is possible going forward.

The candidate demonstrates DEPTH in the Assurance role.

CPA Map T	echnical Competency:	Core	E3 AS
4.1.1	Assesses the entity's risk assessment process	Α	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Should the external auditor be interested in relying on the work of the QC team, the team would be treated as internal auditors. CAS 610 Using the Work of Internal Auditors, paragraph 15, requires that the external auditor evaluate the following when determining whether to rely on the work of internal auditors to reduce the nature, timing and extent of audit procedures to be performed:

- "(a) The extent to which the internal audit's function's organizational status and relevant policies and procedures support the objectivity of the internal auditors;
- (b) The level of competence of the internal audit function; and
- (c) Whether the internal audit function applies a systematic and disciplined approach, including quality control."

## Objectivity

The team does not have a formal document setting out its role within ECI or its reporting structure. However, the fact that the team appears to report to the controller is likely to concern the external auditor. Should the team raise concerns regarding ECI's financial reporting or internal controls and make recommendations that reflect negatively on the controller's performance, or with which the controller disagrees, the team could be pressured to change its opinion, thereby compromising its objectivity. Therefore, I recommend that the reporting structure be changed such that Jason reports directly to Jen, or preferably, a Board of Directors, if one exists.

As part of her efforts to manage the relationship with Ruby's management prior to completing Step 3, Jen has instructed the team not to question Ruby's management once it begins to audit Ruby, so that management does not feel it is being critiqued. It is imperative that the team has unrestricted access, at all times, to both ECI's and Ruby's records, and management. The restriction should be removed immediately, as the external auditor is unlikely to be able to rely on the team's work without it having unrestricted access at all times.

## Competency

Additionally, the external auditor is likely to have some concerns about the competence of the team in the area of finance and accounting. While Jason has both CPA and CIA designations and I have a CPA designation, François, who appears to be performing the majority of the financially-related testing, would appear to lack the education and experience necessary for his role. Although having a Bachelor of Applied Science in Environmental Systems Engineering would qualify François to assist ECI with its endeavors to protect the environment, François would lack the financial accounting, audit and internal controls expertise essential to his role as internal auditor. In fact, François has acknowledged this lack of expertise by expressing interest in enrolling in the CIA program. Further, there is nothing to suggest that he has any work experience other than at ECI, and that experience is limited. As such, it is recommended that François immediately enroll in and complete the Certified Internal Auditor program, to develop the requisite knowledge. Also, the other two members have no financial expertise. Therefore, when hiring additional internal auditors in the future, it is important that those hires have the required education and experience, or that plans are put in place to develop this expertise.

# **Systematic Approach**

The projects performed are based on Jason's professional judgment and the next project is only decided upon once the current project is complete. While Jason is experienced in internal audit, it is important that a plan be prepared and feedback sought from management and the external auditor prior to its approval, to ensure that the team is able to demonstrate a systematic approach to its work and that all significant risk areas are evaluated by the team. This makes it unlikely that the external auditor will currently be able to rely on the team's work. To ensure that the external auditor is able to rely on the team's work going forward, an audit plan for the year ending December 31, 2020, should be developed immediately, and approved prior to starting additional projects. This audit plan should provide details regarding the audits to be conducted of both ECI and Ruby. Also, it should be approved by Jen or the board rather than the controller, to ensure the team's objectivity.

In addition, the team has sent some audit reports to the controller without those reports being reviewed, and without addressing any deficiencies in the work performed. Although the reviews of these audit reports were completed after the fact, when coupled with François's lack of the necessary education and experience, the audits completed may not have addressed all significant matters or included appropriate recommendations. Again, this makes it unlikely that the external auditor will currently be able to rely on the team's work. To ensure that all of the team's reports are reviewed prior to their release, it is imperative that Jason request and receive approval for the hiring of additional internal auditors in order to have the necessary staffing.

Overall, it is unlikely that the external auditors will be able to rely on the work of the team for the audit of the financial statements for the year ended December 31, 2019. However, should my recommendations be implemented going forward, it should be possible for the external auditor to rely on the work of the team in future years. It should also be noted that, although CAS 610 permits this reliance, there is nothing that requires the external auditor to do so.

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 whether an external auditor would be able to rely on the work of the QC team or provides some recommendations for the team going forward.

**Competent** – The candidate discusses whether an external auditor would be able to rely on the work of the QC team and provides some recommendations for the team going forward.

**Competent with distinction** – The candidate thoroughly discusses whether an external auditor would be able to rely on the work of the QC team and provides several recommendations for the team going forward.

# DAY 2 – MARKING GUIDE – FINANCE ROLE ENVIROCAB INC. (ECI)

In the Finance role, the candidate is expected to prepare a five-year cash budget for ECI and Ruby, to determine when ECI will be able to repay Jen. The candidate is also expected to calculate the expected rate of return for ECI, using the capital asset pricing model. Using this information, the candidate is expected to assess an expansion opportunity (the ride-sharing application), considering both qualitative and quantitative factors, and provide a recommendation to ECI. Next, the candidate is expected to discuss the financial risks associated with a financing proposal and recommend ways to mitigate the risks. Finally, the candidate is expected to consider alternatives for a new investor to buy into ECI by calculating the conversion value of proposed Class B preferred shares and discussing the rights attached to the investment options.

## See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

**To:** Jen Toy **From:** CPA

**Subject:** ECI requests

## Assessment Opportunity #7

The candidate prepares a combined five-year cash budget for ECI and Ruby, and determines when ECI will be able to repay Jen.

The candidate demonstrates DEPTH in the Finance role.

	CPA Map Technical Competency: (Applicable comp map is 2019 modified, i.e., DAIS and GST/HST are not testable)		Elective
5.2.1	Evaluates the entity's cash flow and working capital	Α	Α

### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies and purpose and type(s) of information to be gathered.
- 2.1.2.2 Uses appropriate methods to gather or develop relevant information.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.5.1 Develops appropriates decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions.

	Forecast, year ended December 31,				
	2020	2021	2022	2023	2024
ECI:					
Income (loss) before taxes	(1,138,000)	(468,000)	162,000	1,072,000	1,777,000
Add: depreciation and amortization	785,000	785,000	785,000	785,000	785,000
Less: income taxes (Note 1) Less: debt repayments – PFB loan	0	0	0	0	0 (3,100,000)
Forecast cash flows	(353,000)	317,000	947,000	1,857,000	(538,000)
Ruby:					
EBITDA	2,800,000	3,280,000	3,640,000	4,050,000	4,470,000
Less: depreciation and amortization	(950,000)	(950,000)	(950,000)	(950,000)	(950,000)
Less: Ruby limousine interest	(160,000)	(160,000)	(160,000)	(160,000)	(160,000)
Less: mortgage interest	(55,000)	(50,000)	(44,000)	(38,000)	(33,000)
Pre-tax income	1,635,000	2,120,000	2,486,000	2,902,000	3,327,000
Less: income taxes (Note 2)	(425,100)	(551,200)	(646,360)	(754,520)	(865,020)
After-tax income	1,209,900	1,568,800	1,839,640	2,147,480	2,461,980
Add: depreciation and amortization Less: debt repayments	950,000	950,000	950,000	950,000	950,000
Ruby electric vehicles lease	(720,000)	(720,000)	(720,000)	(720,000)	(720,000)
Mortgage principal	(125,000)	(130,000)	(136,000)	(142,000)	(147,000)
Forecast cash flows	1,314,900	1,668,800	1,933,640	2,235,480	2,544,980
Total forecast cash flows	961,900	1,985,800	2,880,640	4,092,480	2,006,980

# Notes:

- 1. Due to loss carryforwards likely to be available to ECI, income taxes for ECI are assumed to be nil each year.
- 2. Income taxes for Ruby are calculated using a rate of 26%.

Based on the above, the combined entities of ECI and Ruby may have sufficient cash flow to repay Jen's shareholder loan in 2022 and still meet their debt obligations (including the PFB loan). This assumes that the terms of the preferred shares allow for Jen's repayment prior to any dividends being paid on the preferred shares. To ensure that it is able to meet its working capital needs as revenue grows, the amount of cash required to operate the business should also be considered.

For Assessment Opportunity #7 (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 a five-year cash budget for ECI and Ruby.

**Competent** – The candidate prepares a reasonable five-year cash budget for ECI and Ruby, and determines when Jen can be repaid.

**Competent with distinction** – The candidate prepares a comprehensive five-year cash budget for ECI and Ruby, and determines when Jen can be repaid.

# **Assessment Opportunity #8**

The candidate calculates the required rate of return for ECI.

The candidate demonstrates DEPTH in the Finance role.

CPA Map Technical Competency:		Core	Elective
5.2.5	Evaluates the entity's cost of capital	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.2 Uses appropriate methods to gather or develop relevant information.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.7 Explicitly articulates and justifies assumptions.

Comparable company data was provided for four publicly-traded companies; however, they are not all comparable to ECI:

- Diamond Cabs Inc. is somewhat comparable to ECI, but is more reflective of Ruby's current operating model.
- Medallion Financial Inc. is not comparable to ECI; it is only in the business of renting licences.
- We Drive Ltd. is somewhat comparable to ECI; although We Drive Ltd. owns the licences, it rents the licences to drivers, who are contractors rather than employees.

• CarShare Inc. is not comparable to ECI as it is a car-sharing company, which is not in the same industry. Also, it operates in the U.S., which is likely to be a different market.

		Note	
Risk-free rate	3.00%	1	A
Market rate of return	8.50%		В
Beta	0.9	2	С
Size premium	6.00%		D
Company-specific risk premium	2.00%	3	E
Cost of equity	15.95%	•	$F = A + C \times (B - A) + D + E$
Cost of debt	5.50%	4	G
Tax rate	26.00%		Н
After-tax cost of debt	4.07%	•	I = G × (1 - H)
Debt-to-total-capital ratio	55.00%	5	J
Weighted-average cost of capital	9.42%		F × (1 - J) + I × J
Additional premium	5.00%		
Required rate of return	14.42%		
		:	

#### Notes:

- 1. Risk-free rate is based on the rate provided in the case.
- 2. Beta is based on the average beta of We Drive Ltd. and Diamond Cabs Inc., which were previously identified as being the best comparables to ECI.
- 3. Company-specific risk premium is based on consideration of the following risk factors:
  - a. ECI is a newer company than the somewhat comparable companies.
  - b. Significant changes are happening at ECI, such as the acquisition of Ruby, which adds to the risk of achieving its strategic plan /forecasts.
- 4. Cost of debt is based on the risk-free rate provided in the case.

5.	Diamond Cabs Inc.	50.00%
	We Drive Ltd.	60.00%
		55.00%

Based on the above analysis, the hurdle rate for ECI is 14.42%.

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 calculate the required rate of return for ECI using a weighted-average cost of capital model.

**Competent** – The candidate calculates the required rate of return for ECI using a weighted-average cost of capital model, with reasonable assumptions around the beta and debt-to-total-capital ratio.

**Competent with distinction** – The candidate calculates the required rate of return for ECI using a weighted-average cost of capital model, making reasonable assumptions and providing a thorough discussion of the comparable companies.

# **Assessment Opportunity #9**

The candidate provides quantitative analysis of the ride-sharing alternatives and performs a sensitivity analysis.

The candidate demonstrates DEPTH in the Finance role.

CPA M	ap Technical Competencies:	Core	Elective
5.3.1	Develops or evaluates capital budgeting processes and decisions	В	Α
5.6.1	Evaluates the purchase, expansion, or sale of a business	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.2 Uses appropriate methods to gather or develop relevant information.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.3.6 Performs and interprets sensitivity analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.

# **Ryde Green**

I have calculated the NPV of the Ryde Green program as follows:

			Note
	10,000 trips	20,000 trips	
Average price per km	1.50	1.50	
Annual km sold	4,160,000	8,320,000	1
Total driver fees	6,240,000	12,480,000	
Revenues – fee to ECI	624,000	1,248,000	2
Expenses			
Inspection costs	100,000	100,000	3
Operating costs	124,800	249,600	4
Pre-tax annual earnings	399,200	898,400	
Less: taxes @ 26%	103,792	233,584	
Annual earnings from Ryde Green	295,408	664,816	
Earnings per km	0.07	0.08	
Upfront costs			
Application build	250,000	250,000	5
Free trips	24,000	24,000	6
Pre-tax upfront costs	274,000	274,000	
Taxes @ 26%	71,240	71,240	
Total upfront costs	202,760	202,760	
NPV	1,313,429	3,209,425	7
Notes:			
Annual kilometres are calculated as fo	llows:		
Trips per week	10,000	20,000	
Average km per trip	8	8	

Trips per week	10,000	20,000
Average km per trip	8	8
Weeks per year	52	52
Annual km	4,160,000	8,320,000

- 2. ECI receives a 10% fee (half of the 20% fee) from the drivers.
- 3. 50% of inspection and app maintenance costs
- 4. 20% of ECI's revenues (624,000 × 20%)
- 5. ECI's 50% share of \$500,000 app development cost

6. The cost of the free trips is calculated as follows:

Free trips offered	5,000
Km per trip	8
Fee paid to driver per km	\$1.20
Total cost	\$48,000
Cost paid by ECI	\$24,000

7. NPV is based on the upfront cost and the present value of the forecast earnings over a 10-year period, discounted at a rate of 14.42%, and tax adjusted at a rate of 26%.

# **EcoCab**

I have calculated the NPV of the EcoCab program as follows:

			Note
	10,000 trips	20,000 trips	
Revenues	6,240,000	12,480,000	1
Less: driver fees	4,992,000	9,984,000	2
Net revenues	1,248,000	2,496,000	•
Expenses			
Inspection costs	200,000	200,000	
Operating costs	374,400	748,800	3
	574,400	948,800	_
Pre-tax annual earnings	673,600	1,547,200	
Less: taxes @ 26%	175,136	402,272	
After-tax annual earnings from EcoCab	498,464	1,144,928	_
Earnings per km	0.12	0.14	•
Upfront costs			
Application build	2,500,000	2,500,000	
Free trips	96,000	96,000	4
Pre-tax upfront costs	2,596,000	2,596,000	
Taxes @ 26%	674,960	674,960	
Total upfront costs	1,921,040	1,921,040	
	<u> </u>		
NPV	637,339	3,955,331	5
			•

# Notes:

- 1. In the EcoCab program, ECI will receive the total driver revenues.
- 2. Drivers in the EcoCab program will receive \$1.20 per kilometre driven.

3. 30% of ECI's net revenues  $(30\% \times 1,248,000)$ 

4. The cost of the free trips is calculated as follows:

Free trips offered 10,000
Km per trip 8
Fee paid to driver per km \$1.20

Total cost \$96,000

5. NPV is based on the upfront cost and the present value of the forecast earnings over a 10-year period, discounted at a rate of 14.42%, and tax adjusted at a rate of 26%.

Based on the above analysis, the base scenario of 10,000 trips per week results in a higher NPV through the Ryde Green partnership. However, if demand doubles, the NPV of the EcoCab program will be higher.

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 attempts a quantitative assessment of the alternatives.

**Competent** – The candidate provides a reasonable quantitative assessment of the alternatives.

**Competent with distinction** – The candidate provides a reasonable quantitative assessment of the alternatives, and performs a sensitivity analysis.

# **Assessment Opportunity #10**

The candidate provides qualitative analysis of both ride-sharing alternatives and recommends an option.

The candidate demonstrates DEPTH in the Finance role.

CPA M	ap Technical Competencies:	Core	Elective
5.3. 1	Develops or evaluates capital budgeting processes and decisions	В	Α
5.6.1	Evaluates the purchase, expansion, or sale of a business	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications.
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions.

# **Ryde Green Program**

# Advantages:

- Ryde has experience with starting a ride-sharing program; its app development and maintenance cost estimates are more likely to be accurate.
- Ryde has an existing customer base that can support the program; number of trips is a key driver of the financial success of the app.
- Ryde already has electric-vehicle drivers as part of its driver pool, who can be transitioned to Ryde Green.
- The upfront costs are lower, which, given ECI's current financial constraints, is beneficial.
- If ECI does not work with Ryde, Ryde will work with a different company. By working with Ryde, ECI will avoid competing with Ryde.

#### <u>Disadvantages:</u>

• If the government resolves the issues related to ride-sharing programs in general, ECI will have to share the benefits of the increased demand with Ryde, resulting in lower annual income from the program.

# **EcoCab Program**

#### Advantages:

- As you have indicated that there is a limited driver pool, by utilizing both the ECI and Ruby fleets, there is the option of increasing the driver pool.
- Given the current trend away from traditional taxi companies, developing a ride-sharing model better positions ECI for the future.
- Due to the nature of its driver fee structure, ECI will generate significantly higher returns if the government resolves the issues related to the ride-sharing program.
- ECI will control the marketing of the app and therefore control the ability to expand if the app appears to be successful.
- This may generate additional income beyond the 10-year term of the Ryde Green agreement, which would contribute positively towards the EcoCab quantitative analysis.

### Disadvantages:

- Ethan has limited app development experience, which could result in cost overruns, delays in completion or technical issues with the app.
- This represents a new business model for ECI, which is risky, particularly as it relates to the number of trips and cost estimates.
- Given that ECI is new to the industry, it might not be able to attract a high volume of drivers; if there are insufficient drivers, ECI may not be able to provide 10,000 trips per week.
- ECI expects to be able to subcontract the driver evaluations and vehicle inspections to a third
  party at the same overall cost as Ryde; given its smaller size relative to Ryde, this may not be
  possible, resulting in higher costs.

#### Conclusion

Based on the above quantitative and qualitative analyses, I recommend partnering with Ryde; the NPV of EcoCab is lower in the base scenario and there is significant risk associated with the upside scenario. Further, Ryde's experience with ride sharing will be helpful to ECI, as it has limited experience in this area.

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 attempts a qualitative assessment of both alternatives.

**Competent** – The candidate provides a reasonable qualitative assessment of both alternatives and provides a recommendation.

**Competent with distinction** – The candidate provides an in-depth and balanced qualitative assessment of both alternatives and provides a recommendation.

# **Assessment Opportunity #11**

The candidate discusses the financial risks associated with the financing program and recommends mitigating strategies for those risks.

The candidate demonstrates DEPTH in the Finance role.

CPA M	ap Technical Competencies:	Core	Elective
5.1.2	Develops or evaluates financial proposals and financing plans	В	Α
5.5.1	Develops or evaluates financial risk management policies	В	Α

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications.
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions.
- 2.1.6.2 Uses brainstorming or other techniques to search for alternatives, issues, perspectives, and implications not already identified.

## **Operational Risk – Financing Program**

Financing programs are not part of ECI's core operations; ECI does not appear to have any expertise in offering financing programs. If the borrowers do not repay, with ECI's current negative profit situation (combined with the upcoming PFB loan repayment), this program could put ECI's operations at risk.

I recommend that ECI mitigate the risk by ensuring the credit quality of borrowers, and perhaps financing through a separate entity to limit the impact of losses on ECI's core operations.

# **Operational Risk – Drivers Leaving Program**

The current description of the financing program does not address the scenario in which a car owner wants to exit the program, beyond the increase in interest rate. This could result in uncertainty around the outcome if a driver requests to exit, and inconsistent treatment of exiting drivers.

I recommend that ECI establish a policy for drivers exiting the program, for example, by requiring that drivers buy out the car at a specified price (based on the age and condition of the car).

#### Interest Rate Risk

ECI is borrowing from SafeBank at a floating rate but lending to car buyers at a fixed rate; this exposes ECI to interest rate risk, particularly in a rising rate environment, which could result in additional costs to ECI.

I recommend negotiating a fixed-rate operating facility with SafeBank, or entering a fixed-versusfloating interest rate swap, to lock in ECI's interest rate.

# Credit (Default) Risk - Down Payment

The buyer is not making an initial deposit on the car; this increases ECI's risk exposure as the buyer has no financial investment in the car.

I recommend that ECI require buyers to put a down payment on the car, even if it is a small one, so that they are financially vested in the car.

## Credit (Default) Risk - Credit Approvals

ECI is not conducting credit checks on buyers, which exposes ECI to significantly higher default risk. That ECI is in a second-priority position and is charging interest only in Years 1 to 5 further increases ECI's potential losses in a default situation.

I recommend that ECI have a formalized credit approval process, which includes a credit check.

#### Credit (Default) Risk - Security

SafeBank has a priority security position and its principal is paid off first. This leaves ECI in an exposed position as cars depreciate quickly in the first years of their lives, particularly given the 20,000 km per year commitment to the ride-sharing service (plus the driver's personal mileage), which puts substantial wear on the car and further reduces the value of the security. Given that ECI's loan is interest-only in Years 1 to 5, ECI may not be able to fully recover on its loan if the buyer defaults.

I recommend that ECI require a personal guarantee from the buyers (assuming the buyer has sufficient net worth to support the loan); this will reduce the risk of default from the buyer and also provide ECI with an alternative avenue through which it can recover its losses. Alternatively, ECI could require its loan to amortize from Day 1, to reduce the risk of not recovering on its loan. ECI could also consider limiting each driver's personal mileage, to reduce the wear and tear on the vehicles.

# **Liquidity Risk – Security**

ECI's primary security for the loan is the cars, which are not a liquid asset. Although ECI plans to incorporate any repossessed cars into its fleet, it may not need additional cars, which puts ECI in the position of having to sell the cars. Their illiquidity and condition could limit the amount that ECI can recover on its loan.

I recommend that ECI require a personal guarantee from the buyers so that it has recourse against the buyer for the difference between the amount that ECI is able to recover on liquidation and the outstanding loan.

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 discusses some of the financial risks associated with the financing program.

**Competent** – The candidate discusses several of the financial risks associated with the financing program and provides mitigation strategies for these risks.

**Competent with distinction** – The candidate provides a thorough discussion of the financial risks associated with the financing program and provides mitigation strategies for these risks.

# **Assessment Opportunity #12**

The candidate calculates the conversion value of the Class B preferred shares in 2024.

The candidate demonstrates DEPTH in the Finance role.

СРА М	ap Technical Competency:	Core	Elective
5.4.2	Applies appropriate methods to estimate the value of a business	В	Α

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.7 Explicitly articulates and justifies assumptions.

To calculate the conversion value of the Class B preferred shares in 2024, we need to first value ECI in 2024.

# **Valuation of Ruby**

		Note
EBITDA – 2024	\$ 4,470,000	1
Selected multiple	5	
Enterprise value	22,350,000	
Less: mortgage payable	(660,000)	2
Equity value	 21,690,000	
Portion owned by ECI	 80%	3
ECI's interest in Ruby	\$ 17,352,000	

#### Valuation of ECI

			Note
EBITDA – 2024	\$	2,880,000	1
Add: Ryde Green pre-tax earnings		399,200	4
Adjusted EBITDA		3,279,200	
Selected multiple		5	
Enterprise value		16,396,000	
Add: investment in Ruby		17,352,000	
Less: shareholder loan		(2,000,000)	5
Total equity value		31,748,000	
Less: preferred shares		(22,360,000)	6
Common equity value		9,388,000	
Outstanding shares		1,000	
Value per share	\$	9,388	
value per snare	Φ	9,388	

#### Notes:

- 1. EBITDA for ECI and Ruby is as calculated in Assessment Opportunity #7.
- 2. Mortgage payable, assuming that the only outstanding long-term debt in Ruby relates to the mortgage payable, based on acquisition, is the balance of \$1,340,000 less principal payments from 2020 to 2024.
- 3. After conversion of the convertible debt, ECI will own 80% of Ruby.
- 4. This assumes that ECI proceeds with the Ryde Green ride-sharing service option.
- 5. The shareholder loan owing to Jen is \$2 million; the PFB loan is paid off in 2024 and therefore does not factor into the valuation.
- 6. Preferred shares is comprised of the book/face value of the shares plus the cumulative dividends of 9% over the eight-year period.

Based on the above analysis, the Class B preferred shares will convert at a value of \$9,388 per common share.

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 calculate the conversion value of the Class B preferred shares.

**Competent** – The candidate calculates the conversion value of the Class B preferred shares.

**Competent with distinction** – The candidate accurately calculates the conversion value of the Class B preferred shares, taking into consideration the convertible debt dilution of ECI's interest in Ruby.

# **Assessment Opportunity #13**

The candidate discusses the investment options proposed by Ethan and makes a recommendation.

The candidate demonstrates DEPTH in the Finance role.

СРА М	ap Technical Competency:	Core	Elective
5.2.4	Evaluates decisions affecting capital structure	В	Α

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Based on the conversion value, an investment in Class B preferred shares would convert into the following ownership interest:

Equity investment	5,000,000
Value per share	9,388
Shares issued to Ethan	533
Total outstanding shares	1,533
% owned by Ethan	34.75%

# Option 1

The advantages of Option 1 are as follows:

- There is no conversion option, which results in less risk for Jen.
- Lack of a board also likely results in Ethan having less influence over the direction of ECI, which Jen prefers.

## Option 2

The advantages of Option 2 are as follows:

- Based on the forecasts for ECI and Ruby, Ethan would receive 34.75% of ECI, which allows Jen to retain control over ECI. However, if ECI is unable to meet its financial projections, Ethan would receive more shares of ECI, potentially resulting in him having control of ECI.
- The Class B preferred shares pay no dividends, which results in cash savings that could be better utilized for ECI's operations.
- After conversion, Ethan will be able to nominate a larger percentage of the board (increasing from 20% to 34.75%), which increases his influence over the direction of ECI after conversion.

Based on the above, I recommend Option 1. Although the Class A preferred shares have a high annual dividend, Jen likely does not want to lose control of ECI, which is an overriding concern with Option 2.

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 attempts an analysis of the investment options.

**Competent** – The candidate provides an analysis of the investment options, including an analysis of Ethan's ownership interest, and makes a recommendation.

**Competent with distinction** – The candidate provides a thorough analysis of the investment options, including an analysis of Ethan's ownership interest and considering ECI's ability to make dividend payments, and makes a recommendation.

# DAY 2 – MARKING GUIDE – PERFORMANCE MANAGEMENT ROLE ENVIROCAB INC. (ECI)

In the Performance Management role, the candidate is expected to consider ECI's and Ruby's business models from a qualitative perspective and recommend which one to pursue. In addition, the candidate is expected to calculate the number of rides required for both business models to generate the same net income for ECI, and assess ECI's vision and strategy and fit with the Sustainable Economic Development Policy. The candidate is also expected to consider the governance implications of the Eagle Eyes Energy Ventures proposal. Finally, the candidate should analyze the various operational choices available to ECI, including outsourcing the car maintenance versus keeping it in-house, the drivers' compensation package changes and the high-speed link proposal.

# See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

To: Jen Toy From: CPA

**Subject:** ECI requests

# **Assessment Opportunity #7**

The candidate provides an analysis of the number of trips that Ruby would need to make per day, using ECI's model, to generate the same profit as under its current model.

The candidate demonstrates DEPTH in the Performance Management role.

CPA Map Technical Competency: (Applicable comp map is 2019 modified, i.e., DAIS and GST/HST are not testable)		Core	Elective
3.5.1	Performs sensitivity analysis	А	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.7 Explicitly articulates and justifies assumptions.

Raymond would like to know the number of trips that Ruby would need per day, under ECI's business model, to generate the same profit as under Ruby's current model. Because ECI's model has greater fixed costs than Ruby's model, a lower ridership would make its model less profitable than Ruby's model. As ridership increases, there reaches a point where the fixed costs are covered and ECI's model earns the full contribution margin for every trip (as opposed to only 7.5% in Ruby's model), thereby becoming more profitable than Ruby's model.

If Ruby kept its existing business model, it would have no fixed operating costs other than the dispatching and administrative costs. As these administrative and dispatching costs are not affected by the choice of a business model, they have been left out of the calculation. Its only variable operating cost would be the amount kept by the driver, which is 92.5% of the fare (100% - the 7.5% royalty). As the average fare is \$21 per trip, the sole operating variable cost is the variable fee kept by the drivers, which amounts to \$19.425 per trip.

If Ruby adopted ECI's business model, the operating costs would be both fixed and variable, most of them being fixed. The following table summarizes these operating costs under ECI's business model.

#### **Annual Fixed Costs**

		No. of		
	Per Car	Cars	Total	<u>-</u>
Insurance	\$800	200	\$ 160,000	
Registration	\$250	200	50,000	
Maintenance	\$1,500	200	300,000	
Limousine depreciation	\$5,000	80	400,000	$($50,000 \times 1/10 = $5,000$
Lease payments	\$6,000	120	720,000	$(12 \text{ months} \times $500 = $6,000)$
Salaries			7,488,000	$(40 \text{hrs} \times $18/\text{hr} \times 52 \text{ weeks} \times 200)$
Interest on convertible				
debt			160,000	(\$4,000,000 × 4%)
				_
Total fixed costs			\$9,278,000	=

# Variable Costs per Trip

		Km per		
	Per Km	Trip	Cost per Trip	
Maintenance	\$0.15	8	\$1.20	
Electrical charge	\$0.02	8	0.16	•
			\$1.36	per trip

Moving Ruby to ECI's business model would therefore generate a total of \$9,278,000 in additional fixed operating costs, but in return would reduce the variable cost per trip by \$18.065 (\$19.425 - \$1.36). This would become profitable once the number of trips reaches 513,590 (\$9,278,000/\$18.065) per year, or 1,407 trips per day (513,590/365 days).

For the two models to be equivalent, 1,407 trips per day are therefore needed.

If ridership is expected to regularly be lower than that, Ruby should keep its current model of having the drivers own the cars and be self-employed. If ridership is expected to regularly be higher than that, Ruby should adopt ECI's model sooner as it is more profitable. In addition, the 10-year useful life of the taxis may be too long, given that usage is more than typical wear and tear; any change in this assumption will also change the number of trips required.

Some candidates interpreted the required as being a calculation of the number of trips required by Ruby under the ECI business model to achieve the same profit as it is currently generating under its current model, which is \$250,000 for a two-month period. Although this was not the original intent of the required, the BOE accepted the approach as an alternative way of demonstrating competence.

Assuming that revenues are generated consistently throughout the year, this profit target would amount to an annual profit of \$1.5 million. The following table summarizes the calculation of the number of trips required to generate this profit.

# Additional Fixed Costs Generated by the ECI Model:

	P	er Car	No. of Cars	Total	_
Insurance	\$	800	200	\$ 160,000	
Registration	\$	250	200	\$ 50,000	
Maintenance	\$	1,500	200	\$ 300,000	
Limousine depreciation	\$	5,000	80	\$ 400,000	$($50,000 \times 1/10 = $5,000)$
Lease payments	\$	6,000	120	\$ 720,000	$(12 \text{ months} \times $500 = $6,000)$ $(40 \text{hrs} \times $18/\text{hr} \times 52 \text{ wks} \times$
Salaries				\$ 7,488,000	200)
Interest on convertible debt				\$ 160,000	_(\$4,000,000 × 4%)
Total fixed costs				\$ 9,278,000	A
Required net income (\$2 months, annualized)	50,00	0 for 2		\$ 1,500,000	_ B
Total contribution margin required				\$ 10,778,000	C = A + B

### **Contribution Margin per Trip Using the ECI Model:**

Average fare per trip \$ 21.00

Variable costs:

Maintenance \$ 1.20 Electrical charge \$ 0.16 \$ 1.36

\$ 19.64 D

Number of trips required under the ECI models to generate the same profit

**548,778** C/D

Number of trips per day: 1,503

For Assessment Opportunity #7 (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 calculate the number of trips per day required to generate the same profit.

**Competent** – The candidate provides a reasonable calculation of the number of trips per day required to generate the same profit.

**Competent with distinction** – The candidate provides an accurate calculation of the number of trips per day required to generate the same profit, clearly understanding the impact of profits on the two business models.

# **Assessment Opportunity #8**

The candidate analyzes and compares ECI's and Ruby's business models and makes a useful strategic recommendation.

The candidate demonstrates DEPTH in the Performance Management role.

СРА	Map Technical Competency:	Core	E1 PM
2.4.1	Analyzes the key operational issues, including the use of information assets and their alignment with strategy	В	А

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

As part of Step 3, Jen plans to fold Ruby's business into ECI's. However, each business model is widely divergent on the operational, financial and strategic levels, which ultimately affects the risks that ECI faces, as well as its value creation potential.

#### **Operational**

	ECI Business Model	Ruby Business Model
Drivers	Full-time employees	Independent contractors
Compensation	Fixed salary plus benefits	Fares collected (less royalty to Ruby) and no benefits
Car ownership	ECI	Drivers
Permit ownership	ECI	Drivers
Type of car	Electric	Fuel-consuming

# Financial

	ECI Business Model	Ruby Business Model
Cost structure	High fixed costs, as a significant	Almost all costs are variable and
	portion of costs (wages,	are paid only if revenues are
	benefits, taxes, utilities,	generated. Fixed costs, such as
	insurance) must be paid upfront	dispatch office costs, are
	by ECI, regardless of revenues.	minimal.
	The only costs that are	
	somewhat variable are	
	maintenance and electric power.	
Capital intensity	Very capital intensive, as ECI	No capital is required, except to
	owns both cars and permits	fund accounts receivables from
		drivers.
Financing needs	Extremely high and continuous,	Negligible, as no long-term
	as cars regularly need to be	assets are needed
	updated and purchased, to	
	maintain the fleet in good	
	condition	
Overhead	Since ECI owns cars and	Minimal, since the company
	permits and employs the drivers,	owns few assets and has few
	it needs an administrative	employees
	structure to manage human	
	resources, compensation,	
	maintenance, etc.	
Break-even	Very high, as fixed costs are	Low, as most costs are variable
	high	

# Strategic

	ECI Business Model	Ruby Business Model	
Quality control	Direct, as ECI owns the cars	More uncertain, as drivers are	
	and employs the drivers	self-employed and own their	
	(although it seems doubtful that	cars; quality standards can be	
	robust quality control processes	imposed but may encounter	
	are in place at ECI)	resistance from drivers	
Socially responsible	Depends upon compensation	Drivers live with uncertain	
	and working conditions, but	compensation as they do not	
	offers full-time employment	know how much they will earn in	
		a given day, and are dependent	
		upon a contractual arrangement	
		with Ruby.	

Environmentally friendly	Yes, as ECI cars are electric	No, as Ruby drivers use	
		traditional cars; however, over	
		time, they can migrate to electric	
		cars	
Strategic flexibility	Not much, as assets are	Large, as there are no	
	potentially stranded and ECI	potentially stranded assets and	
	relies on full-time employees	few employees	

#### Recommendation

ECI's current business model requires significant financial resources to be invested in order for it to turn a profit, which might exhaust Jen's resources and patience. Moreover, while the ECI model allows Jen to impose her social and environmental goals more easily, such goals can also be accomplished by revising Ruby's contract with its drivers, to offer more certainty in income while not compromising its profitability, and migrating them toward electric cars, which they would still own. Moreover, in terms of quality control, standards could be set to ensure that Ruby drivers are accountable.

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 qualitative analysis of the two business models at the operational, financial and strategic levels.

**Competent** – The candidate provides a reasonable qualitative analysis of the two business models at the operational, financial and strategic levels.

**Competent with distinction** – The candidate provides an in-depth qualitative analysis of the two business models at the operational, financial and strategic levels, and provides a useful strategic recommendation.

# **Assessment Opportunity #9**

The candidate analyzes how ECI's strategy fits with the Policy's goals and explains why ECI and Ruby are eligible for funding.

The candidate demonstrates DEPTH in the Performance Management role.

СРА	Map Technical Competencies:	Core	E1 PM
2.3.1	Evaluates the entity's strategic objectives and related performance measures	В	А
2.3.2	Evaluates the entity's internal and external environment and its impact on strategy development	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

Jen's business strategy was to create an environmentally-friendly business that provided a safe working environment with decent working conditions. Moreover, ECI's vision ("To be the leader in sustainable personal transportation") and mission ("To develop a collective transportation system that is environmentally efficient, socially conscious, and respectful of clients") statements encompass both social and environmental issues. ECI's business strategy, and vision and mission statements appear to fit well with the Policy.

ECI's business model is also a fit with the Policy's targets:

- Reduction of 20% in greenhouse gas (mostly carbon dioxide) emissions by 2030 Being electric, ECI cars do not emit any greenhouse gas.
- Reduction of 30% in kilometres driven in personal cars by 2030 ECl's taxi service provides an alternative to the use of personal cars; multiple people can use one vehicle, reducing the number of personal cars on the road.
- Reduction of 40% in gas consumption by 2030 Being electric, ECI cars do not consume any
  gas.
- Reduction of 50% in fuel-consuming car and truck sales by 2030 As ECI provides an alternate way of transportation, its operations are contributing to the reduction of sales of fuel-consuming cars.

Reduction of 50% in poverty rate by 2030 – ECI employs drivers and offers them a full-time
contract with a set salary and benefits. By encouraging some people to join the workforce,
and assuming that the wages paid are higher than the province's poverty line, ECI contributes
to the reduction in the poverty rate.

ECI's ability to access the Policy's financial support plan is also well grounded in its business model:

- The funding must be used for new investment in capital expenditures that contribute to the
  achievement of the Policy's social and environmental targets Any additional funds to be
  obtained by ECI (or Ruby) would be used to purchase electric cars that will serve as taxis,
  which is capital in nature; as demonstrated above, these electric cars would contribute to the
  achievement of the Policy's social and environmental targets.
- Businesses must be either profitable or expecting to reach profitability in the near term While ECI has not yet reported a profit, its business plan, which includes implementation of Step 3, envisions profitability. Moreover, on the basis of the information currently available, on a consolidated basis with Ruby, ECI is much closer to break-even (ECI reported an operating loss of \$2,065,000 in its last year of operations, which is a monthly loss of \$172,083; by contrast, Ruby reported a profit of \$250,000 for its last two months of operations, which equals \$125,000 per month).
- Businesses must offer working conditions, salary, benefits and vacation that meet the
  industry's standards Since it provides the drivers with a full-time position with a fixed wage
  and benefits, ECI offers wages and benefits that exceed those obtained by the self-employed
  drivers in the industry, who have no compensation benefits. Ruby's drivers currently have
  working conditions that are comparable to other drivers in the industry. ECI's drivers have a
  more predictable and stable compensation scheme, which is in line with the Policy.
- Businesses must be controlled ultimately by either an Alberta resident or entity Jen is an Alberta resident. Since ECI is an Albertan entity, Ruby, being controlled by ECI, is also eligible for funding.
- Priority will be given to not-for-profit entities, cooperatives, employee-owned entities and small- and medium-sized businesses – Both ECI and Ruby can be considered small- and medium-sized businesses, given ECI's fleet of only 150 electric cars, which will potentially only grow to several hundred in the next few years.
- Priority will be given to high-pollution industries Transportation represents a large source of greenhouse gas emissions (30%) and, within that industry, ground transportation is one of the largest pollution contributors (75%). ECI operates in the transportation industry, so it will be given a higher priority for receiving financial support.

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 to analyze whether ECI's vision and strategy fit with the Policy, but does not systematically address how ECI's business model addresses the Policy's goals or eligibility criteria.

**Competent** – The candidate discusses how ECI's vision and strategy fit with the Policy's goals, and why it would be eligible for funding according to the Policy's criteria.

**Competent with distinction** – The candidate discusses how ECI's vision and strategy fit with the Policy's goals, and why it would be eligible for funding according to the Policy's criteria. As ECI controls 100% of Ruby and plans to integrate the two entities, the candidate also incorporates Ruby into their analysis.

# **Assessment Opportunity #10**

The candidate analyzes the governance implications of EEEV's proposal.

The candidate demonstrates DEPTH in the Performance Management role.

CPA I	Map Technical Competencies:	Core	E1 PM
2.1.1	Evaluates the entity's governance structure (policies, processes, codes)	В	Α
2.1.4	Analyzes the specific role of the board in an entity's social responsibility strategy and sustainability	С	В

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

The governance implications of EEEV's financing proposal are extensive:

- As EEEV's ultimate owner is Integrated Oil Corporation, one of North America's largest oil and gas firms, having EEEV be part of ECI's ownership may undermine its green and environmentally-friendly image. Moreover, having an oil and gas company in ECI's ownership may compromise its commitment to the purchase of electric cars, which do not run on gas.
- EEEV's degree of representation on ECI's board does not seem to match the relative size of its actual financial investment.
- While EEEV's representation on ECI's board appears subordinate to Jen's (the same number less one), in practice it may be equivalent, as the chair will be appointed by Jen but from a list supplied by EEEV. EEEV and Jen would therefore split the board in terms of representation. This implies that Jen would lose effective control over ECI.
- Since, in practice, EEEV and Jen would have equal representation on ECI's board, stalemates
  could arise on strategic decisions over which there is disagreement between the two parties;
  decisions could be delayed or dropped.
- Since ECI is essentially a taxi company, the most common capital investment decision it
  makes is the purchase of new cars. However, since any capital investment exceeding \$20,000
  is to be approved by the board's executive committee, the control of ECI's investment strategy
  (and most operational capital expenditures) would rest with the executive committee, not with
  Jen or the board.
- As two out of three members (one designated member, plus the chair) would be representing
  its interests, the executive committee would be controlled by EEEV.
- If Jen's ownership falls below 50%, she could lose even more influence as she would lose the ability to choose the chair from the list submitted by EEEV.
- ECI's board would lose all flexibility in future financing as EEEV would have priority, and Jen would also lose any control over her ability to recoup some of her investment in the company via dividends.
- The three board candidates suggested by EEEV have extensive business experience but in the oil and gas industry. None of them has ever worked in the consumer service industry, which is ECI's core business. Moreover, none of them has experience in green technologies or in mobile transportation. The ability of the board to steer ECI's strategy may thus be compromised.

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 discussion of the governance implications of the proposed financing by EEEV.

**Competent** – The candidate discusses several governance implications of the proposed financing by EEEV.

**Competent with distinction** – The candidate discusses governance and control implications at the levels of ownership, board of directors and executive committee, and identifies the disconnect between EEEV's ultimate ownership and ECI's mission and strategy.

# **Assessment Opportunity #11**

The candidate analyzes how ECI should manage the maintenance servicing of its cars (in-house or outsourcing).

The candidate demonstrates DEPTH in the Performance Management role.

CPA I	Map Technical Competencies:	Core	E1 PM
3.3.2	Evaluates and applies cost management techniques appropriate for specific costing decisions	В	Α
2.3.3	Evaluates strategic alternatives	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.3 Considers alternative interpretations of quantitative and qualitative information.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.4.7 Explicitly articulates and justifies assumptions.

#### **Current Maintenance Costs**

	Estimated Annual Maintenance Costs
Fixed annual costs (\$1,500 per car per year × 150 cars)	\$225,000
Incremental variable costs (150 cars × 100,000 km per year per car ×	
\$0.15 per km)	\$2,250,000
	\$2,475,000

Current maintenance costs are estimated to be around \$2,475,000 per year. As we can assume that drivers need to drive between trips to pick up clients, we have used 100,000 kilometres per year to estimate maintenance costs rather than kilometres driven for client trips.

#### Lassonde Proposal

Using \$2,475,000 as the benchmark, we can estimate that Lassonde's contract proposal implies a first-year cost of \$2,351,250 (\$2,475,000 less 5%). The high and low ranges for the second and third years can be estimated as follows.

	First Year (Fixed Cost Contract)	Second Year	Third Year
High-end estimate			
(+ 10% per year)	\$2,351,250	\$2,586,375	\$2,845,012
Low-end estimate			
(- 5% per year)	\$2,351,250	\$2,233,688	\$2,122,003

Based on Lassonde's actual experience with ECI's fleet of cars, maintenance costs could be as high as \$2,845,012 or as low as \$2,122,003 by the third year.

#### **In-House Maintenance**

	Incremental
	Estimated First-Year
	Maintenance Costs
Labour (wages and benefits)	\$1,300,000
Manager's raise	\$15,000
One-time lease break-up payment	\$20,000
Utilities, taxes and other building costs	\$250,000
Supplies and parts	\$500,000
Amortization – building (\$1 million over 20 years, assuming a	
negligible salvage value)	\$50,000
Amortization – equipment (\$1.6 million over 10 years, assuming a	
negligible salvage value)	\$160,000
Foregone lease rental revenue	\$20,000
	\$2,315,000

# **Analysis**

The quantitative analysis suggests that setting up an in-house maintenance service centre offers the lowest-cost solution for ECI in the first year. Compared to the current annual maintenance costs of \$2,475,000, ECI would experience a reduction in maintenance costs of around \$160,000 (about 6%) by switching to an in-house operation. An in-house operation would also be less costly than outsourcing to Lassonde, by around \$36,250 (about 1.5%).

However, development and implementation of the in-house alternative presents several challenges to ECI when compared to the Lassonde proposal:

- ECI would establish only one service centre in Calgary. Assuming that Ruby drivers migrate to electric cars as well, the question arises as to where drivers outside of Calgary will service their cars. Having all drivers service their cars in Calgary does not seem the most efficient and cost-effective solution, especially if they have to drive from as far away as Edmonton. Moreover, if cars are involved in an accident or are immobilized for any reason, towing cars from Edmonton to Calgary also seems a costly process. Therefore, centralization of maintenance service in Calgary is likely to negatively affect the revenues that will be generated by non-Calgary drivers and incur additional costs, such as towing.
- In contrast, Lassonde has multiple service centres, both in Calgary and Edmonton. Lassonde would be able to service all of ECI's and Ruby's cars, irrespective of their location.
- ECI's mission and strategy is to offer an emission-free transportation service to Alberta residents. Jen does not seem to have any particular expertise or experience in overseeing a car maintenance service operation. Moreover, moving maintenance in-house does not seem to fit with ECI's strategy and business model and makes human resources management more complex by introducing new types of employees.

 ECI has reported losses for the past two years and Jen had to inject \$2 million in additional funds into the firm. Bringing maintenance service and car repairs in-house requires an upfront investment of \$3 million, which will then not be available for expanding the firm's fleet and scale of operations.

However, once ECI has moved its business to Lassonde, it is captive to that firm's pricing conditions as only the first year effectively guarantees a saving. For Years 2 and 3, Lassonde can manage the "reported" costs via its pricing policy and thus allow itself to increase the prices, with ECI having few ways to verify the reasonableness of the prices charged by Lassonde. It would be very easy for Lassonde to obtain a 10% increase in the contractual amount for Years 2 and 3.

The other disadvantage is that, whereas the overall amount to be charged by Lassonde can only move within a defined range, ECI has a formal commitment toward Lassonde at the beginning of each year, regardless of its actual experience in terms of customer service and quality.

#### Recommendation

It is recommended that ECI pursue further negotiations with Lassonde to outsource its maintenance service but seek modifications in the contractual terms for: more flexibility to reflect ECI's actual experience; and verification mechanisms, to ensure that Lassonde does not overprice or overcharge for services.

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 a quantitative analysis of the options presented.

**Competent** – The candidate performs a reasonable quantitative analysis of the options presented, incorporates some qualitative elements in the analysis and provides a recommendation.

**Competent with distinction** – The candidate performs a comprehensive quantitative analysis of the options presented, incorporates several qualitative elements in the analysis and provides a recommendation.

# **Assessment Opportunity #12**

The candidate analyzes ECI's current driver compensation policy and the relative merits of alternatives suggested.

The candidate demonstrates DEPTH in the Performance Management role.

	Map Technical Competency:	Core	E1 PM
3.7.1	Analyzes the implications of management incentive schemes and employee compensation methods	В	А

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.2.3 Verifies/corroborates/tests information and evaluates the quality of information sources, as needed, to satisfy the purpose of the analysis.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

It appears that ECI's current drivers' compensation contract does not incentivize its drivers to be:

- polite to clients (there have been significant, negative social media commentaries).
- efficient in terms of the routes they take and the kilometres they drive.
- effective in their ability to obtain trips (ECI is currently generating a loss and revenues are not growing).
- purposeful in their willingness to seek long-term relationships with clients, such as hotels, businesses, and professionals, who need transportation services on a regular basis for specific purposes (as per industry newsletter information).
- economical in the way they drive their car, to minimize maintenance costs and optimize the car's useful life (maintenance costs are high).
- upfront in reporting and declaring small or short trips paid in cash.
- safe (Jen noticed that ECI cars seem to need more maintenance than expected due to minor accidents and braking systems wearing down often).

Without a proper performance management system, the current compensation arrangement potentially undermines the value creation potential of the business by not optimizing revenues and not minimizing costs.

DPP's partner has proposed three alternatives, as discussed below.

## Option 1:

- As both parties in a profit-sharing plan benefit from increased profits, this should lead drivers'
  and the owner's interests to converge and cause drivers to behave in ways that are consistent
  with the owner's interests, that of optimizing revenues and minimizing costs.
- However, because ECI has not reported a profit in the past two years, offering such a plan
  and then reporting a loss, which implies no payment to drivers, undermines the effectiveness
  of this plan.
- Offering such a plan also forces ECI to open its books to drivers. While it may be consistent with Jen's social vision, it limits her potential ability to make operating and strategic decisions, as drivers may oppose those that reduce earnings in the short run.
- While drivers are paid on a weekly basis, profit-sharing payments would likely be on a quarterly, or even annual, basis, when audited reporting takes place. The time between drivers' actions and behavior and their reward may be long, which undermines the incentive dimension of the plan.

#### Option 2:

- This incentive plan establishes a fit between ECI's and the drivers' interests in terms of revenue maximization and cost minimization.
- Based on the 2019 financial statements, this incentive plan represents an amount of \$225,000 to be paid to drivers (2% x \$11,250,000). That represents an increase of around 3% in their compensation (\$225,000 versus \$7,975,000 in wages and benefits). Based on an average \$21 trip, that represents a \$0.42 additional payment to drivers per trip.
- While the incentive payment to be made is a relatively small proportion of revenues and drivers' compensation, it increases ECl's loss before income tax by almost 10% (assuming no other parameters change).
- The critical question is if the incentive plan will induce a change in drivers' behaviour to increase revenues and reduce costs. At an estimated 3% of total drivers' costs, the incentive appears fairly tangential and should not affect behaviour that much. However, for a driver taking an average of 15 trips a day, 5 days a week, 50 weeks a year, at \$21 per average trip, that represents an amount of \$1,575 if paid in one instalment. This is a significant sum for someone making \$18 an hour (which does include benefits).

#### Option 3:

- A straight commission arrangement would establish a direct fit between ECI's and the drivers' interests.
- If a driver performs poorly, he gets nothing or a very small amount; therefore, ECI is not committed to a fixed cost.

- However, using current numbers, drivers would trade \$7,975,000 in wages and benefits for \$2,250,000 in commissions (20% x \$11,250,000). For drivers to earn a level of income under the commission scheme that is similar to their current wages and benefits, fares would have to triple to more than \$30 million, an outcome that seems highly unlikely.
- Offering a 20% commission is likely to create resentment and other negative reactions among drivers, as they will perceive the measure as a way to reduce their compensation. The consequences are thus likely to be opposite to those expected.

#### Conclusion

The profit-sharing plan and commission alternatives do not seem likely to be effective or feasible as the amounts are either too small to affect behavior or will lead to such a reduction in compensation that drivers may quit or seek other measures to oppose ECI's move. The incentive plan should be analyzed further as it does promote convergence of interests between ECI and drivers, and may induce improved behaviour. To further motivate poor-performing drivers and still reward those drivers performing well, the magnitude of the incentive could be adjusted according to the level of fares collected.

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 a discussion of the three proposed compensation plans or discusses the current employment agreement and its behavioral implications.

**Competent** – The candidate discusses the three proposed compensation plans, discusses the current employment agreement and its behavioral implications, and links the analysis to the various incentives suggested by Jen.

**Competent with distinction** – The candidate performs a thorough discussion of the three proposed compensation plans, and makes several links between the analysis and the various incentives suggested by Jen.

# **Assessment Opportunity #13**

The candidate analyzes, from a qualitative standpoint only, whether the proposed high-speed link investment represents a good strategic decision for ECI.

The candidate demonstrates DEPTH in the Performance Management role.

СРА	Map Technical Competency:	Core	E1 PM
2.2.1	Assesses whether management decisions align with the entity's mission, vision and values	В	Α

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered.
- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.3.7 Considers whether data are sufficiently complete, valid, and reliable for the purpose of the analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences.
- 2.1.4.4 Analyzes and synthesizes the views of others to develop a more complete understanding of issues and/or implications of alternatives.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.

The investment opportunity in the high-speed link raises several questions.

#### Fit with ECI Strategy

- Exclusive access to the two terminals will provide revenue opportunities for ECI.
- The two terminals are located downtown, close to where most taxis already operate, so ECI
  does not need to commit taxis in locations, such as at the airport, that are far away from its
  main operations.
- The alliance with the high-speed link may offer an opportunity for ECI to gain exposure and further knowledge about smart vehicles, which represents an emerging trend and can be expected to be more environmentally efficient.
- Associating with a transportation service that relies on environmentally-friendly energy sources supports ECI's environmental branding.
- ECI faces a problem in terms of ridership as its fare revenues do not cover its costs. Obtaining
  exclusive access to the terminals in the province's two largest cities' downtowns expands
  ECI's reach in terms of potential clients and constrains its competitors' marketplace presence.
- Setting up the link will reduce the number of cars driving between Calgary and Edmonton as well as the resulting pollution, an outcome that is consistent with Jen's vision and ECI's strategy.

# Lack of Fit with ECI Strategy

- ECI is currently considering a bid for the Calgary airport. It might lack the resources to assign another pool of cars to two new locations on a permanent basis.
- ECI is currently only based in Calgary. Ruby operates mostly in Calgary, and it is unknown
  whether Ruby has any cars in Edmonton. Servicing an Edmonton terminal with a number of
  cars may be a challenge.
- Most inter-city travellers move between downtown office locations, which raises the issue of whether the terminals will generate much taxi business, as both will be located in each city's downtown area.
- The success of the project is yet to be supported by additional studies, so ECI's \$1 million investment is at risk.
- The financing of the project is not finalized, so it is unclear at this stage if there is enough financial backing to realize the project.
- It is not possible to estimate the future benefits to be derived from the project as there is too
  much uncertainty surrounding its technical, economic and financing viabilities, and the
  project's time horizon is not yet determined. In particular, the demand for such a link is a key
  element that has yet to be assessed. It is therefore not possible to estimate the return on the
  \$1 million investment by ECI.

Overall, as ECI is already facing several challenges of its own in terms of profitability, and needs financing in order to expand its electric car fleet, investing \$1 million in the express link venture further constrains the cash resources available to ECI to pursue its own strategic goals. We recommend not pursuing this investment for the time being.

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 a discussion of the qualitative aspects and strategic fit of the proposed investment.

**Competent** – The candidate performs a reasonable discussion of the qualitative aspects and strategic fit of the proposed investment, and provides a recommendation consistent with their analysis.

**Competent with distinction** – The candidate performs a comprehensive discussion of the qualitative aspects and strategic fit of the proposed investment, considers ECI's current financial state and provides a recommendation consistent with their analysis.

# DAY 2 – MARKING GUIDE – TAXATION ROLE ENVIROCAB INC. (ECI)

In the Taxation role, the candidate is expected to discuss the Ruby tax issues, including the use of the loss carryforwards and calculation of taxable income and federal taxes payable. The candidate is also expected to discuss how Jen can extract cash from the business in a tax effective manner. In addition, the candidate should discuss the tax implications to the drivers of becoming employees, as well as the implications of the additional employee benefits considered by ECI. Finally, the candidate is expected to analyze the impact of the Ruby acquisition on Jen's ability to utilize the lifetime capital gains deduction.

### See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

**To:** Jen Toy **From:** CPA

**Subject:** ECI requests

# **Assessment Opportunity #7**

The candidate discusses the impact of acquisition of control on the availability of losses in Ruby.

The candidate demonstrates DEPTH in the Taxation role.

-	Competency: e comp map is 2019 modified, i.e., DAIS and GST/HST are not testable)	Core	E4 TAX
6.6.3	Analyzes income tax implications of the purchase and sale of a CCPC	В	В

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.5.3 Develops implementation plans for recommendation(s).

#### **Acquisition of Control of Ruby**

Several tax consequences result from the acquisition of control on November 1, 2019.

#### Non-capital losses

Non-capital losses will survive acquisition of control but can only be used against income from the same or a similar business. Since Ruby is continuing its existing operations with a reasonable expectation of profit (the company has earned \$250,000 already since acquisition), the business portion of the non-capital loss can be used.

I have assumed that the losses were derived from the business and not from the rental income; however, this should be confirmed. As I have calculated income for the two-month stub period below, it is a reasonable assumption that the rental property is not losing money.

In this case, as Ruby's October 31, 2019, taxable income would already have to be nil if there is a non-capital loss balance to carry forward, any accrued business losses will be added to the existing non-capital loss. It will be applied in calculating taxable income for the two months ended December 31, 2019.

#### Net capital losses

Net capital losses of \$50,000 will expire at the deemed year end at acquisition of control (October 31, 2019, in this case). However, under paragraph 111(4)(e) of the Income Tax Act, there is an election available to recognize accrued gains on capital property in order to use the net capital losses so they do not expire. This is possible in this case and will be discussed below.

#### Recognition of accrued losses

Ruby must recognize all accrued losses at the deemed year end. This includes any asset for which its fair market value (FMV) is less than its tax base.

There is only one such instance; the Class 8 office equipment has an FMV of \$25,000 and an undepreciated capital cost (UCC) of \$50,000. The difference is recognized as capital cost allowance (CCA) of \$25,000 (\$50,000 - \$25,000) in the October 31, 2019, tax return, which increases the non-capital loss carryforward from \$35,000 to \$60,000.

There may be some accrued losses on portfolio investments, but I do not have enough information to determine this.

# Election to recognize accrued gains

The election in paragraph 111(4)(e) can be used on any capital property that has an accrued gain. The two qualifying assets are the land (\$800,000 FMV exceeds \$500,000 adjusted cost base (ACB)) and goodwill (the value of which is determined in Assessment Opportunity #13 to be \$1,640,000, although its ACB is unknown). Since the accrued gain on the land exceeds the available net capital loss carryforward, we will use the land.

To optimize this election, the deemed proceeds of disposition should be \$600,000. This creates a taxable capital gain of \$50,000 [(\$600,000 - \$500,000)/2 = \$50,000]. The net capital loss can now be utilized and there are no adverse tax consequences from the elections.

#### New tax basis

The items discussed above will have an impact on the tax return for Ruby's two-month period ended December 31, 2019. The new opening UCC for Class 8 is \$25,000 (\$50,000 - \$25,000 deemed CCA).

The new ACB of the land is now equal to the \$600,000 deemed proceeds of disposition. This has no tax consequence until the land is sold.

The new non-capital loss balance for the December 31, 2019, tax return is \$60,000.

Ruby's other tax balances, such as its general rate income pool (GRIP), ERDTOH and NERDTOH, will carry forward and will be available to it as normal.

For Assessment Opportunity #7 (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 discuss the consequences of an acquisition of control on the losses in Ruby.

**Competent** – The candidate discusses the consequences of an acquisition of control on the losses in Ruby.

**Competent with distinction** – The candidate discusses in depth the consequences of an acquisition of control on the losses in Ruby.

# **Assessment Opportunity #8**

The candidate calculates Ruby's taxable income for the two months ending December 31, 2019.

The candidate demonstrates DEPTH in the Taxation role.

СРА Мар	Technical Competency:	Core	E4 TAX
6.2.2	Advises on taxes payable for a corporation	В	Α

#### **CPA Map Enabling Competencies**:

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.2 Determines whether precise calculations, estimates, forecasts, or projections are required.
- 2.1.3.3 Uses information technology to support and improve analysis.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.

### **Calculation of Net Income for Tax Purposes and Taxable Income**

Taxable income is calculated as follows:

Net income	\$ 250,000	
Amortization	15,000	
Meals and entertainment	2,000	(\$4,000 × 50%)
Golf dues	3,000	
Financing fees deducted in financial		
statements	5,000	
Financing fees (par. 20(1)(e))	(167)	$($5,000/5 \times 61/365)$
CCA (Note 1)	(26,449)	
Net income for tax purposes	248,384	
Charitable donation (computer equipment)	(500)	
Dividends received	(6,000)	
Non-capital loss carryforward	(60,000)	
Taxable income	\$ 181,884	

As it is a condition of financing, the life insurance premium is deductible. The mortgage interest is incurred for the purpose of earning income and is therefore also deductible.

Note	1		$\sim$	$\sim \Lambda$	
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	6%	20%	100%	5% Class	55%	
_	Class 1*	Class 8**	Class 12	14.1***	Class 50	
Opening UCC	\$1,500,000	\$25,000	\$ 0	\$1,500	\$75,000	
(November 1, 2019) Additions	φ1,500,000	φ <b>2</b> 5,000	20,000	<b>Φ1,500</b>	2,500	
Disposals		(700)			(500)	
UCC before CCA	1,500,000	24,300	20,000	1,500	77,000	
ADD: 1/2 net acquisitions to calculate accelerated						
investment incentive	0	0	10,000	0	1,000	
Base for CCA	1,500,000	24,300	30,000	1,500	78,000	_
						Lesser of Base × CCA
CCA	\$ 90,000	\$ 4,860	\$20,000	\$ 500	\$42,900	rate OR UCC.
Total CCA	\$ 158,260	:				
Prorated (61/365) for short year	\$ 26,449					

- \* CCA on the rental portion of the property is limited to rental income before deducting CCA (that is, CCA cannot create a rental loss). As calculated in Assessment Opportunity #9, Note 7, rental income is positive, even after deducting CCA, so the full amount of CCA is allowable.
- \*\* Opening UCC for Class 8 after the acquisition of control is calculated in Assessment Opportunity #7.
- \*\*\* The allowable deduction in Class 14.1 is the greater of the amount otherwise calculated or \$500, which in this case is \$500.

For Assessment Opportunity #8, 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 calculation of taxable income.

**Competent** – The candidate prepares a reasonable calculation of taxable income.

**Competent with distinction** – The candidate prepares a thorough calculation of taxable income.

# **Assessment Opportunity #9**

The candidate calculates Ruby's federal taxes payable for the two months ending December 31, 2019.

The candidate demonstrates DEPTH in the Taxation role.

CPA Map Technical Competency:		Core	E4 TAX
6.2.2	Advises on taxes payable for a corporation	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.3.1 Identifies the purpose of computations and analyses, and considers qualitative factors.
- 2.1.3.2 Determines whether precise calculations, estimates, forecasts, or projections are required.
- 2.1.3.3 Uses information technology to support and improve analysis.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.

### **Calculation of Taxes Payable**

The calculation of federal taxes payable is as follows:

			Note
Basic tax on taxable income	38%	\$ 69,116	
Federal abatement	10%	(18,188)	
Small business deduction (SBD)		(1,598)	1
Additional refundable tax (ART)		1,087	2
General rate reduction (GRR)		(21,227)	3
Federal Part I tax		29,190	
Part IV tax		2,300	4
Dividend refund		(38,333)	5
Federal taxes payable (receivable)		\$ (6,843)	

# Notes:

# 1. Small business deduction (SBD)

ے ا	ast	of.
ᆫ	เลอเ	UI.

Active business income (ABI) (Note 6)	\$ 238,190
Taxable income	181,884
Limit (Note 8)	8,408

Least:

	8,408
×	19.00%
\$	1,598

# 2. Additional refundable tax (ART)

Lesser of:

Aggregate investment income (AII) (Note 7)	\$ 10,194
Taxable income	176,884

Lesser:

# 3. General rate reduction (GRR)

Taxable income	\$ 181,884
Amount eligible for SBD	(8,408)

AII (10,194

	(10,194)	
	163,282	This also equals "adjusted taxable
		income" (for GRIP)
×	13.00%	
\$	21,227	

# 4. Part IV tax

Portfolio dividends received (eligible) \$ 6,000 × 38 1/3%

\$ 2,300
•

#### 5. Dividend refund – eligible pool

Lesser of:

38 1/3% of eligible dividends paid
Eligible RDTOH \*\*

\*\* Eligible RDTOH:
Part IV tax on eligible dividends
Opening balance

\$38,333 = \$100,000 × 38 1/3%
\$67,300

\$40,000 × 38 1/3%
\$67,300

Note: The dividend is small enough that Ruby only needs to use the ERDTOH pool. The dividend refund would come out of this first, so there is no need to calculate the NERDTOH pool.

#### 6. Active business income (ABI)

Net income for income tax purposes (NIFTP) \$248,384
All in NIFTP (Note 7) (10,194)
\$238,190

#### 7. Aggregate investment income (AII)

Rental revenue	\$ 30,000	= \$15,000 × 2 months
Interest expense	(8,250)	= \$11,000 × 75%
CCA - Class 1 only	(11,281)	= \$90,000 × 61/365 × 75%
Life insurance	(150)	= \$200 × 75%
Financing fees	(125)	= \$167 × 75%
	\$ 10,194	

Because 75% of the building is used to earn rental income, all the common expenses of the building must be prorated by 75% in the determination of AII.

# 8. Business limit for ECI and Ruby

As otherwise determined	\$ 83,562	(\$500,000 × 61/365)
ss. 125(5.1) grind is the greater of:		
(a) Taxable capital     ECI – long-term debt     ECI – shareholder's equity     ECI – investment allowance     Ruby – long-term debt     Ruby – shareholder's equity	5,100,000 8,057,000 (3,100,000) 1,340,000 3,100,000 14,497,000	
Grind is A × B /\$11,250, where A is: Business limit	83,562	
B is: 0.225% × (Taxable capital - \$10 million)	10,118	
Taxable capital grind is therefore:	75,154	
(b) Investment income Grind is D/\$500,000 × 5(E - \$50,000), where D is: Business limit	83,562	
E is: Combined adjusted aggregate investment income (AAII): Ruby AII (Note 7) Plus: Ruby dividends Intercompany dividends are excluded, and ECI has no AII	10,194 6,000 16,194	
Grind is therefore:	(28,249)	
The greater of these two is the taxable capital grind.		
The small business limit is: As otherwise determined Minus: taxable capital grind	\$83,562 (75,154) \$ 8,408	

100% of the small business deduction limit is allocated to Ruby as ECI does not need the SBD due to losses.

#### GRIP and eligible dividend

General rate income pool (GRIP)

Opening GRIP \$2,000,000
Eligible dividends received 6,000
72% of "adjusted taxable income" (Note 3) 117,563

\$2,123,563

There is sufficient GRIP for the \$100,000 dividend to be an eligible dividend; therefore, there are no taxes or penalties associated with an overpaid eligible dividend.

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 attempts a calculation of taxes payable.

**Competent** – The candidate prepares a reasonable calculation of taxes payable.

**Competent with distinction** – The candidate prepares a thorough calculation of taxes payable.

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

The candidate discusses tax planning strategies for taking out excess cash.

The candidate demonstrates DEPTH in the Taxation role.

CPA Map Technical Competencies:		Core	E4 TAX
6.3.2	Evaluates income taxes payable for an individual	В	Α
6.6.2 Analyzes income tax implications of compensation planning between a shareholder and a closely-held corporation		С	В

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.4 Differentiates problems having a single viable solution/conclusion from problems having multiple potentially viable solutions/conclusions.
- 2.1.4.1 Explores potentially viable solutions or conclusions.
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications.
- 2.1.4.7 Explicitly articulates and justifies assumptions.
- 2.1.5.3 Develops implementation plans for recommendation(s).
- 2.1.6.1 Identifies and sets aside preconceived ideas that might bias or limit analyses and conclusions.
- 2.1.6.2 Uses brainstorming or other techniques to search for alternatives, issues, perspectives, and implications not already identified.
- 2.1.6.3 Investigates potential use of unconventional approaches to gather information, perform analyses, or reach conclusions.

#### **Shareholder Compensation**

Jen has asked for advice, from a tax perspective, on how she can take cash out of ECI. The most common methods of cash extraction from a corporation are through payment of salaries and through payment of dividends, but I will also discuss other options that may be more tax advantageous.

### Salary or bonus

#### Amounts deductible by the corporation

Jen appears to be actively involved in ECI's business, as she was involved in starting it up and has executed several steps of the plan herself. Employment income (such as salaries or bonuses) paid to employees is generally deductible by the corporation to the extent that it is reasonable. In the case of shareholder-employees who run the company themselves, almost any amount would be considered "reasonable" for this purpose, so there should be no difficulty deducting \$100,000 as salary or bonus.

#### Amounts taxable to employee

Amounts paid to Jen as employment income would be included in her income in the year in which she receives it. ECI will be required to withhold income taxes and payroll taxes (such as CPP and EI), and will issue Jen a T4, reporting the income she earned. This will be considered "earned income" for the purposes of generating contribution room for her RRSP, which is not the case for dividends. It will also qualify Jen to receive the Canada employment amount, a non-refundable credit worth \$187 (\$1,245 × 15%).

#### <u>Dividends</u>

#### Implications to the corporation

Dividends paid by ECI to Jen are not deductible from ECI's income. However, since ECI is a Canadian-controlled private corporation (CCPC), it will carry eligible and non-eligible refundable dividend tax on hand (ERDTOH and NERDTOH) accounts. These accounts will track the refundable portion of Part I tax (paid on investment income) and Part IV tax (paid on dividends received, such as those from Ruby).

ECI will pay Part IV tax on the dividends it receives from Ruby, equal to the amount of dividend refund that Ruby received; for 2019, that was \$38,333. It will also pay refundable Part I tax on investment income it earns. In turn, when ECI pays dividends to Jen, ECI receives a refund from these RDTOH accounts, limited to 38 1/3% of the dividends paid in the year. One, \$100,000 payment to Jen should be enough to clear this balance.

#### Dividends taxable to Jen

Jen's taxation on dividends will depend on the type of dividend she receives from ECI.

If the dividends are eligible dividends, these will be grossed up by 38% and included in Jen's income, and would be eligible for a credit of 6/11ths of the gross-up. For example, if she receives a \$100,000 eligible dividend, \$138,000 will be included in her income, and her federal income taxes will be reduced by \$20,727. It is likely that ECI's dividends will mostly be eligible dividends, as it will not have the benefit of the small business deduction, due to the taxable capital grind (as calculated earlier). In addition, it has received eligible dividends from Ruby, which will be added to ECI's GRIP balance, from which eligible dividends can be paid.

If the dividends are other-than-eligible dividends, these are taxed using the same mechanism, but are grossed up by 15% and eligible for a credit of 9/13ths of that gross-up. In this instance, \$115,000 would be included in Jen's income, and her federal income taxes would be reduced by \$10,385.

In either case, the tax that Jen pays when receiving a dividend is lower than the tax she pays on employment income. Effectively, this will ensure that Jen only pays the difference between what she would have paid by earning the business income directly, and what was paid by the corporation, although integration is not always perfect.

It is important to note that the preferred shares are entitled to cumulative dividends and have not received any to date. It is likely that they will need to be paid before Jen receives any dividends on her common shares.

#### Capital dividends

If ECI (or Ruby) has certain types of income in the future, such as capital gains, it will be able to make use of the capital dividend account (CDA). The CDA generally includes the non-taxable 50% portion of capital gains earned by a CCPC. Amounts in that account can be paid out to shareholders tax-free as capital dividends. If those shareholders are themselves corporations, capital dividends received are added to their CDA and can be paid out to individual shareholders from there. So, if Ruby has a capital gain in the future, for example, it can pay a capital dividend to ECI, which can, in turn, pay a tax-free capital dividend to Jen.

#### Shareholder loans

Another way to provide compensation to Jen would be to make use of her shareholder loan.

#### Interest

The shareholder loan appears to be interest-bearing, as \$60,000 of interest appears on the 2019 financial statements. Since the funds were used in the business, ECI can deduct the interest expense. Jen is taxed on the interest income received.

#### Principal

ECI owes Jen \$2 million. This is principal on a loan, and when repaid will be a tax-free receipt of cash by Jen. ECI cannot deduct loan repayments. Repaying this loan is the simplest and least costly way of providing cash to Jen in a tax-effective manner.

#### Alternative compensation options

While these would not create cash payments, Jen could also consider including herself in the employee benefit plan discussed later. Since these benefits are offered to all employees, they will be on account of employment, not on account of her shareholding, and will therefore receive the same tax treatment as those discussed for the drivers.

#### Planning considerations

#### Opportunity for deferral with bonus

Bonuses declared in one taxation year of the employer that are paid within 183 days of the end of that year are deductible by the employer. Since Jen would only be taxable on that income in the year in which she receives it, there is an opportunity to defer taxation by declaring a bonus to Jen in one taxation year and paying it to her in the next.

#### Opportunity for choosing which company pays salary

Since Jen seems to be the head of both ECI and Ruby, there is some opportunity to pay her a salary or bonus from one, the other, or both. This will allow her to take advantage of the deduction for her salary in the corporation that could use it the most. For example, if one company is profitable and the other is not, she could take the money from that profitable company as a salary, in order to reduce its income.

#### Loss considerations

ECI is currently in a loss position, and likely has \$4 or \$5 million of accumulated tax loss carryforwards (based on its deficit balance). It is not projected to be profitable for a few more years, and even if intercorporate loss planning is done, Ruby's profits will not absorb ECI's losses for a while. This would be an argument for paying dividends or loan repayments, rather than salary, because the company does not need the deductions.

#### Integration with planning for QSBC shares

Later, I recommend selling Ruby's land and building so that ECI's shares can qualify as QSBC shares for the lifetime capital gains deduction. This will create balances in ECI's capital dividend and RDTOH accounts. It will also create a large pool of cash that needs to be distributed through ECI to Jen, as the undistributed cash will also not be used in the active business. Any decisions around compensating Jen will need to factor these transactions into the analysis.

#### Cumulative net investment loss (CNIL) considerations

It is unclear whether Jen has a CNIL balance, but if she does, this will limit her ability to claim the lifetime capital gains deduction. This would defeat the purpose of the planning for this deduction discussed later. If Jen does have a CNIL balance, any compensation to her should favour income that is considered investment income, that being interest on her shareholder loan or dividends.

#### Recommendation

An analysis should be performed each year to determine how much Jen will take out of the company, considering both the need to reduce non-active business assets in the corporations (for QSBC share purposes) and Jen's personal cash needs.

Until the corporations are profitable, I recommend that cash be paid out through a combination of shareholder loan repayments and dividends, to maximize the dividend refunds received by the corporation. Only when the losses have been used up should additional salary be paid to Jen.

I also recommend that any planning activities for the QSBC share analysis and CNIL considerations be performed first. Assuming that the building is to be sold (whether to Jen, a sister company or a third party), this will create a balance in the capital dividend account. This balance should be paid from Ruby to ECI, and then from ECI to Jen, as it is a tax-free distribution and achieves the removal of excess cash from the company.

Candidates may make any valid recommendation that is consistent with their analysis and the situation.

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 attempts to discuss some of the ways for taking out excess cash.

**Competent** – The candidate discusses some of the ways for taking out excess cash and provides a recommendation.

**Competent with distinction** – The candidate discusses several of the ways for taking out excess cash and provides a recommendation.

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

The candidate discusses the tax implications of the Ruby drivers becoming employees.

The candidate demonstrates DEPTH in the Taxation role.

CPA Map	Technical Competencies:	Core	E4 TAX
6.3.2	Evaluates income taxes payable for an individual	В	Α
6.3.3	Analyzes specific tax-planning opportunities for individuals	В	В
6.4.1	Evaluates adherence to compliance requirements	В	Α

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.4.7 Explicitly articulates and justifies assumptions.

#### **Converting Ruby's Drivers to Employee Status**

#### <u>Administration</u>

As self-employed individuals, the drivers were likely used to paying tax instalments to the CRA directly, as well as paying for the employer's and employee's portion of CPP (based on net business income). When they become employees, Ruby will be withholding income taxes on their behalf and remitting this on a monthly basis, and will withhold CPP and match it, so the drivers will only pay the employee portion. The drivers will also be subject to EI deductions, although they will also become eligible to collect these benefits if they are terminated or cannot work due to illness or disability.

In addition, the drivers are likely used to filing their tax returns on June 15 of each year. As employees, assuming they have no other business income, their filing due date will be on April 30 of each year. They will receive a T4 slip from Ruby, which summarizes their gross salary, CPP deducted, El deducted, income tax deducted, and any taxable benefits given to them.

#### Employee expenses

Generally, the self-employed drivers would have more expenses that they can deduct when compared to employees. Once Ruby's drivers are employees, they will be limited in the deductions available, even if they are required to pay some expenses.

The drivers are earning only a salary and there is no variable pay (e.g., based on the number of trips). Therefore, the drivers would be considered "regular" employees and not commissioned salespersons. This greatly limits the types of expenses for which deductions from employment income can be taken. In any case, deductible employee expenses are limited to the amount of employment income earned in the year.

For the drivers to be able to deduct employment expenses, Ruby would have to provide a signed Form T2200 declaring that the drivers are required to pay for certain expenses as a condition of their employment.

#### Car cleaning

Under paragraph 8(1)(h.1), motor vehicle operating expenses are deductible, and this would qualify.

The amount should be prorated based on the proportion of employment use versus personal use, should there be any. However, since Ruby's drivers would be returning their vehicles at the end of each shift, it is unlikely that there would be any personal-use mileage.

#### Golf shirts

Since the golf shirts are branded with a company logo, they are considered a uniform. Under paragraph 8(1)(i), this would be considered a capital item and is not deductible. CRA confirms this treatment in its Employment Expenses guide (T4044).

Uniforms are required to be placed in Class 12 and subject to CCA without application of the half-year rule. However, under paragraph 8(1)(j), employees are only permitted to deduct CCA on automobiles and aircraft, so no amount related to the uniform is deductible.

#### Bottled water and snacks

Under paragraph 8(1)(i), this is considered a supply and is deductible. These items are being provided as part of the taxi service and are therefore not meals and entertainment expenses.

# Gasoline taxi - sell the vehicle

If the gasoline taxis are sold by the drivers and FMV is less than the existing UCC, there will be a terminal loss, assuming that each driver had only one taxi in their CCA class. Taxis are in Class 16, not Class 10.1, and are therefore not subject to the special rules for Class 10.1. Therefore, there could be a terminal loss.

If the FMV is greater than the existing UCC, there will be recapture.

If the FMV is greater than the adjusted cost base (ACB), there would be a capital gain, although this seems unlikely. FMV will most likely be lower than the ACB, but there cannot be a capital loss on depreciable assets.

#### Gasoline taxi – keep as personal vehicle

If the gasoline taxis are kept by the drivers for personal use, there would be a deemed disposition at FMV. The drivers would then be deemed to reacquire the taxi at that FMV as personal-use property. The deemed disposition will have the same tax implications as an actual disposition, discussed above.

#### <u>Meters</u>

If sold, the meters would be removed from business assets and subject to the same potential tax implications as the taxis.

Similar to the uniforms, there is no way in which the meters can be deducted from employment income if they are kept and used by the drivers for employment purposes. There would be no change in use because the meter would be converted from income-earning purpose to income-earning purpose, which is not considered a change in use. However, due to the limitations on CCA in paragraph 8(1)(j), the meter cannot be added to a new Class 16 within employment income as they are not taxis, even though they are a component of a taxi. Therefore, the drivers will use the meters in the new electric Ruby taxis, but there would be no tax deduction available to them as employees.

#### **GST**

Once the drivers are employees, the principal in the arrangement has changed to ECI, and ECI must now collect and remit GST. The drivers will therefore no longer be able to charge GST and should de-register their businesses. In turn, they will no longer be eligible to receive input tax credits for their costs.

However, since the drivers are responsible for paying some employment expenses, they would be eligible for the employee and partner GST/HST rebate, which is a refundable personal income tax credit. It should be noted that the rebate claimed as a refund in the current year will be employment income for the drivers in the following year.

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 attempts to discuss the tax consequences of Ruby drivers becoming employees.

**Competent** – The candidate discusses some of the tax consequences of Ruby drivers becoming employees.

**Competent with distinction** – The candidate discusses most of the tax consequences of Ruby drivers becoming employees.

#### **Assessment Opportunity #12**

The candidate discusses the tax implications of the proposed employee benefits.

The candidate demonstrates DEPTH in the Taxation role.

CPA Ma	CPA Map Technical Competencies:		E4 TAX
6.2.2	Advises on taxes payable for a corporation	В	Α
6.3.2	Evaluates income taxes payable for an individual	В	Α

# **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.

# **Proposed Employee Benefits**

Benefit	Impact to Employee	Impact to ECI/Ruby
Private health and	Premiums paid by the employer are not	Premiums paid by the company
dental plan	a taxable benefit as they are exempted	are deductible as a normal cost
	by paragraph 6(1)(a).	of doing business.
	Premiums paid by the employee are not	
	deductible but are eligible for the medical	
	expense tax credit.	
Family assistance	Since the drivers would pay the	Since there is no cost or income
plan	premiums themselves, there is no	to the company, the company is
	taxable benefit associated with this plan.	not impacted by this plan.
	Premiums paid by the employee are not	
	deductible but, depending on the nature	
	of the plan, may be eligible for the	
	medical expense tax credit.	
Long-term disability	Generally, premiums paid by the	Premiums paid by the company
plan	employer for a long-term disability plan	are deductible as a normal cost
	would not be a taxable benefit, as	of doing business.
	exempted by paragraph 6(1)(a). Under	
	these conditions, any payment to the	
	drivers from the plan would be taxable,	
	as the premiums were not subject to tax.	
	However, if the drivers choose to	
	contribute any premiums themselves,	
	any income inclusions resulting from	
	payments made by the plan to the	
	drivers would be reduced by the	
	premiums paid (paragraph 6(1)(f)).	

Benefit	Impact to Employee	Impact to ECI/Ruby
Cost of driver's	As a special taxi licence, and the medical	The cost of the driver's licence
licence and	exam required to obtain the licence, are	and medical exam would be
medical	conditions of employment, the cost of the	deductible to the corporation as
examination	licence paid by the employer would not	it is considered a cost of doing
	be a taxable benefit to the driver.	business.
	However, it might only be the	
	incremental cost of the taxi licence that	
	would not be subject to tax. Income Tax	
	Folio S2-F3-C2, which is currently	
	"unpublished" and under review by the	
	CRA for unrelated issues, specifies this,	
	but the general principles identified here	
	apply.	
Gym membership	Dues paid by the employer are a taxable	Dues paid by the employer are
	benefit as the membership is not	not tax deductible, as they are
	primarily for the benefit of the employer.	prohibited by paragraph 18(1)(l).
	CRA publication T4130 Employers'	
	Guide – Taxable Benefits and	
	Allowances specifically cites gym	
	memberships as an example of such a	
	benefit.	
Stock options	Since ECI is a CCPC, all tax implications	Amounts received from the
	are deferred to the year in which the	employees for the stock options
	shares are eventually sold.	have no tax impact, other than
	At that time, there would be an	to increase the paid-up capital
	employment income inclusion, calculated	
	as the difference between the FMV of	determining net income for tax
	the shares at the time of exercise and	purposes, the stock option
	the exercise price.	expense recorded for financial
	There is an available Division C	accounting purposes would
	deduction of one-half of the employment	have to be added back.
	income inclusion. To get the deduction,	
	the FMV of shares at the grant date	
	cannot be greater than the exercise	
	price. As the \$5.00 FMV is less than the	
	\$12.50 exercise price, this condition is	
	met.	
	As ECI is a CCPC, the deduction is also	
	available if the shares are held for at	
	least two years after exercise, even if the	
	FMV of shares at the grant date exceeds	
	the exercise price.	
	There would be a capital gain equal to	
	the difference between the selling price	

Benefit	Impact to Employee	Impact to ECI/Ruby
	and FMV of the shares at the exercise	
	date. 50% of the capital gain is taxable.	

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 discuss the tax consequences of the employee benefits for Ruby or the drivers.

**Competent** – The candidate discusses the tax consequences of the employee benefits for Ruby and the drivers.

**Competent with distinction** – The candidate discusses in depth the tax consequences of the employee benefits for Ruby and the drivers.

#### **Assessment Opportunity #13**

The candidate analyzes whether Jen's shares in ECI qualify as qualified small business corporation shares.

The candidate demonstrates DEPTH in the Taxation role.

СРА Мар	CPA Map Technical Competencies:		E4 TAX
6.3.2	Evaluates income taxes payable for an individual	В	Α
6.6.3	Analyzes income tax implications of the purchase and sale of a CCPC	С	В

#### **CPA Map Enabling Competencies:**

- 2.1.1.1 Obtains an initial understanding of the problem and its context.
- 2.1.1.2 Divides larger problems into appropriate sub-problems to facilitate analysis.
- 2.1.1.3 Exercises judgment in determining whether an issue requires attention.
- 2.1.2.2 Uses appropriate methods to gather or develop relevant information.
- 2.1.3.4 Chooses and applies appropriate analysis techniques.
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis.
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions.
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications.
- 2.1.4.7 Explicitly articulates and justifies assumptions.
- 2.1.5.3 Develops implementation plans for recommendation(s).
- 2.1.6.2 Uses brainstorming or other techniques to search for alternatives, issues, perspectives, and implications not already identified.

#### **Qualification for the Lifetime Capital Gains Exemption**

For Jen to use the lifetime capital gains exemption, her shares in ECI must qualify as qualified small business corporation (QSBC) shares. To qualify, the following tests must be met.

- 1. At the time of disposition, ECI must be a small business corporation (SBC). An SBC is a Canadian-controlled private corporation that has all or substantially all (i.e., greater than 90%) of the FMV of assets:
  - (i) used principally to earn active business income;
  - (ii) as shares in a connected SBC; or
  - (iii) some combination of (i) or (ii).

As Jen is a Canadian resident and controls the corporation, ECI is a CCPC.

The FMV of the active business assets are \$10,464,000 (\$13,564,000 book value - \$3.1 million investment in Ruby). Assuming the book value is similar to the FMV, the FMV of all assets is \$13,564,000. The percentage of assets earning active business income is therefore 77.1%; this is less than the required 90%, so it is necessary to consider whether Ruby is an SBC.

As Ruby is a wholly-owned subsidiary, ECI and Ruby are connected. The FMV of the assets of Ruby are the \$3.1 million purchase price plus the mortgage liability of \$1,340,000, or \$4,440,000. These are made up as follows:

Land	\$ 800,000
Building	1,680,000
Office furniture	25,000
Computer equipment	175,000
Investments	120,000
Goodwill (imputed)	1,640,000
	\$ 4,440,000

Since 75% of the space is being rented, the building and land are not principally (i.e., 50%) being used to earn active business income. Therefore, these are non-qualifying assets. In addition, portfolio investments of \$120,000 would be non-qualifying assets as they are not used in the active business. Together, these comprise 59% of the FMV of assets [(\$1,680,000 + \$800,000 + \$120,000)/\$4,440,000]. Therefore, Ruby is not an SBC, and in turn ECI cannot be an SBC.

2. Over the past 24 months, the shares of ECI have been held by the individual or a person related to that individual.

Jen has owned the shares of ECI since 2017 when the company was incorporated, so has owned the shares for more than 24 months.

3. Over the past 24 months, ECI was a CCPC and more than 50% of the fair market value of its assets were assets used principally to earn active business income.

As established in test #1 above, the percentage of the FMV of assets earning active business income at the end of 2019 is 77.1%. At the end of 2018, the percentage is 100% as there is no investment in Ruby. Therefore, it is reasonable to say that over the last two years, assets used principally to earn active business income exceeded the required 50%.

Because ECI can meet 50% using its own assets that earn active business income without considering the investment in Ruby, there is no need to consider the stacking rules and evaluate Ruby for this test.

#### Conclusion

As ECI does not meet the SBC test, ECI's shares are not QSBC shares. Jen will not be able to claim the lifetime capital gains exemption if she sells ECI in the future unless further steps are taken to "purify" the corporation.

There are several options available to purify the corporation. In order to achieve the required asset base, it may be necessary to combine two or more of these strategies:

- Ruby could sell the land and building that is presently earning rental income and either distribute the cash received as a dividend payment or a repayment of debt. A similar approach could be taken with the investment portfolio.
- If the land and building are required in the business (since 25% is used by Ruby), Jen might be better off owning the land and building personally, or in a sister corporation to ECI.
- ECI has no building on its balance sheet, so it is likely leasing its head office from a third party.
  Ruby could lease 26% of its building to ECI to use for its head office, and this would be treated
  as an asset used in an active business in Canada as it is being leased to an associated
  corporation for use in its active business. This would bring the building's use above the 50%
  threshold.
- It may also be possible to wait until Step 3 is completed, to reduce the amount of purification necessary. The plan involves Ruby acquiring 80 electric limousines at \$50,000 each. This would increase assets used in the active business in Canada by \$4 million, so total assets would then be \$8,440,000 and non-qualifying assets would be 30.8% [(\$1,680,000 + \$800,000 + \$120,000)/\$8,440,000]. This would help Ruby meet the 50% test on an ongoing basis, and a smaller purification would be necessary immediately before any sale transaction, to reduce the amount to less than 10%.

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 attempts to analyze whether ECI's shares are qualified small business corporation shares.

**Competent** – The candidate analyzes whether ECI's shares are qualified small business corporation shares, considering multiple tests.

**Competent with distinction** – The candidate analyzes whether ECI's shares are qualified small business corporation shares, considering multiple tests and providing a recommendation to address the shortcoming.

# APPENDIX D

SEPTEMBER 11, 2020 – DAY 3 SIMULATIONS, SOLUTIONS AND MARKING GUIDES

# COMMON FINAL EXAMINATION SEPTEMBER 11, 2020 – DAY 3

<u>Case #1</u> (Suggested time: 80 minutes)

In February 2020, you, CPA, a sole practitioner, visit a new client, Jump Inc. (Jump), which operates indoor trampoline parks. Trampoline parks are filled wall-to-wall with trampolines, with mats running between them. Trampoline parks are a fast-growing attraction. Because Canadians have disposable income to spend on entertainment, business is thriving.

The owner, Matt, tells you, "Jump currently operates three locations in Ontario. The Toronto location opened in January 2017. The other locations opened in 2019: Hamilton in July and St. Catharines in mid-December.

"To date, I have been using basic accounting software and recording transactions on a cash basis. However, in case I decide to sell the company in the future, I am thinking about following ASPE. What is the difference? Do you recommend that I switch to ASPE? Can you describe, from a qualitative standpoint only, the nature of the changes I will need to make to my income statement if I switch?

"Also, I am wondering whether I should pay myself a dividend instead of a salary or whether I should retain the money in the company, but am unclear of the tax considerations when making that decision.

"I have provided you with a cash-basis income statement for the year ended December 31, 2019 (Appendix I). I would like to understand why operating income is so much lower than the budgeted amount. I know that ticket sales fluctuate—when it is cold or rainy outside, our facilities usually have an increase in activity because people prefer indoor activities, but when it is nice out, they prefer to be outdoors. In 2019, the weather was much better overall than in 2018. In fact, I had planned to advertise in newspaper and radio ads, but we obtained so much exposure through social media this year that I reduced the number of ads near the end of the year.

"As many people have expressed an interest in operating their own Jump park, I am considering an expansion through franchising. To finance the expansion, the bank is willing to loan \$1.2 million to Jump. Principal payments of \$240,000 plus 4% interest would be due on December 31 of each year for five years. I want to know, from Jump's perspective (the franchisor), whether the franchising operations will require additional funding (Appendix II).

"An entrepreneur has approached me with a draft franchise agreement (Appendix III), where he would use Jump's brand and would pay Jump a portion of revenue in return. However, I am unfamiliar with the implications of expanding in this way and would like to understand the risks of the proposed agreement, as well as any suggested revisions."

# APPENDIX I DRAFT INCOME STATEMENT

# Jump Inc. Draft Income Statement For the year ended December 31, 2019

	Actual	Note	Budget
Sales Tickets Refunds Cafeteria	\$ 1,690,000 (24,815) 206,222 1,871,407	1 2 3	\$ 1,780,000 (35,600) 275,000 2,019,400
Expenses			
Advertising and promotion	61,922		115,000
Bank charges and interest	6,101		6,000
Cafeteria food	118,300	4	125,000
Computer equipment and software	23,440	5	24,000
Insurance	83,400	6	66,000
Office	9,753		9,000
Legal	32,877	7	5,000
Rent	190,000		190,000
Salaries and wages	1,056,500	8	1,009,600
Trampolines and mats	150,000	9	125,000
Utilities	24,543		34,000
	1,756,836		1,708,600
Operating income	\$ 114,571		\$ 310,800

#### Matt's Notes:

- 1. Each location gets 180 customers per day on average and charges \$15 per hour per customer. About 80% of the customers purchase one hour while the rest purchase two hours. As at December 31, \$20,000 is owed to Jump from credit card companies.
- 2. Jump's policy is to refund customers for sickness or accidents. Refunds are also issued when a customer is unsatisfied, but only when less than half of the paid-for time is used. With refunds being lower than anticipated, customers must be satisfied!
- 3. In 2019, cafeteria sales at the Toronto location were \$156,000. Based on actual sales in previous years, the budget for Toronto was \$200,000. The balance is from the two new locations.

# APPENDIX I (continued) DRAFT INCOME STATEMENT

- 4. Our policy is to discard perishable food when the expiry date is reached. We try to be prepared for the bigger crowds that come during poor weather. On several occasions, we had to throw out extra food that wasn't sold.
- 5. I spent \$1,500 on computer software, which should last three years. The remaining balance consists of point-of-sale (POS) terminals purchased for the two new locations, which should last five years.
- 6. Insurance premiums are paid once a year for each location. Toronto was quoted \$22,000 for its annual liability insurance, which is what I used for the budget. Our premiums have increased each year since Jump opened.
- 7. Although all customers sign a personal injury waiver, several consultations with our lawyers were required because the number of injury complaints and reported incidents has increased, particularly since the new facilities opened.
- 8. Each location is open every day of the year, 12 hours per day and there are always eight staff members on site. The last pay period was up to and including December 27.
  - I actively managed the Toronto location. Because I thought I could manage by myself, I did not plan for any extra supervisory staff. However, since the new openings, I have had to divide my time between the three locations, which has been challenging. Toward the end of the year, I hired a supervisor for each location, which should help.
  - Given that you have visited our site (Appendix IV), I wonder if there are any control weaknesses that you identified. If so, what improvements would you recommend?
- The trampolines are durable and should last 10 years whereas the mats need to be replaced more regularly, based on usage. Based on ticket sales, I am surprised by how many mats we needed to replace.

# APPENDIX II FRANCHISING INFORMATION

I plan to open 10 franchise locations on January 1, 2021, and another 10 on January 1, 2022, all within Canada. Franchised locations are projected to have the same number of daily customers as the current locations in their first year, to increase by 1% annually for the next three years and to decline by 2% annually for subsequent years.

The franchisees will be required to pay a monthly royalty of 1.5% of total sales.

Three months prior to opening, Jump will provide a \$70,000 loan to each franchisee to help cover their upfront costs. The principal, plus annual interest of 5%, will be repaid evenly over 10 years. Both payments will be due on September 30 of each year.

# APPENDIX III DRAFT FRANCHISE AGREEMENT

#### The franchisor (Jump):

- will arrange and pay for all franchisee's insurance and litigation.
- will reimburse the franchisee for all marketing costs.
- will not open another Jump location within 300 kilometres of the franchisee's location.
- will provide 48-hours' notice before any visits to the franchise location.

#### The franchisee:

- has the right of first refusal on future franchises.
- has control of all marketing initiatives.
- · will rent their own premises at a site of their choosing.
- is responsible for compliance with all safety regulations.
- can sell the franchise at their own discretion.

# APPENDIX IV CPA'S NOTES FROM SITE VISIT

Because Matt asked for help, you did a site visit and made some notes.

There was one cashier at each POS terminal (two at the front entrance, one at the cafeteria). Customers paid with cash, debit card or credit card. When a card was used to pay, receipts were printed from the debit/credit machine. Once they had paid, the cashier used a marker to write an "X" on the back of the customer's hand. The customer then signed a personal injury waiver. An employee at the entrance of the trampoline area checked each person for the "X" as they entered. One family paid for the use of the facilities for one hour but stayed for three hours.

Each till can be opened by using the key kept beside it. I observed one cashier quickly unlock the till to provide a refund to a parent who had a crying child. I did not see any transaction being inputted, documented or approved related to the refund. Throughout the day, the employees changed shifts without changing the till or counting the cash.

At one point, the cafeteria ran out of coffee. An employee took some cash from the till and ran to the store to buy coffee beans. At the end of the day, the cafeteria food was inspected for any items that were past their expiry dates. A surprisingly large number of items needed to be thrown out.

At night, Matt collected the cash in the tills (about \$2,000) and placed it in a safe in his office. He said he does the bank deposit weekly.

# MARKING GUIDE 3-1 JUMP INC. (JUMP) ASSESSMENT OPPORTUNITIES

To: Matt From: CPA

Subject: Advice regarding Jump Inc. (Jump)

#### **Assessment Opportunity #1 (Depth and Breadth Opportunity)**

The candidate discusses the difference between cash-basis accounting and ASPE, and discusses the impact on the income statement of following ASPE.

The candidate demonstrates competence in Financial Reporting.

#### **CPA Map Competencies:**

- 1.1.1 Evaluates financial reporting needs (Core Level A)
- 1.1.2 Evaluates the appropriateness of the basis of financial reporting (Core Level A)
- 1.2.2 Evaluates treatment for routine transactions (Core Level A)

#### Enabling:

- 2.1.4.4 Analyzes and synthesizes the view of others to develop a more complete understanding of issues and/or implications of alternatives
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

#### Cash-Basis Accounting versus ASPE

You mentioned that, given the potential for a future sale of the business, you are considering moving from the cash basis of accounting to adopting ASPE. You have asked for an explanation of the difference between the two, and a description, in qualitative terms, of the nature of the adjustments that would need to be made to your income statement.

Recording transactions on a cash basis means that revenues and expenses are recognized when an exchange of cash takes place and not necessarily when the economic substance of the transaction takes place. Therefore, under the cash basis, if you purchase items such as equipment or supplies on credit, these transactions will not be recorded until Jump makes the cash payment and settles the account. Likewise, if Jump accepts a cash payment for ticket sales when the patron(s) will not actually use the facility until a future date, that transaction will be recorded as revenue in Jump's accounting records even though Jump has not yet fulfilled its part of the transaction (the use of Jump's facility).

ASPE is a set of accounting standards that entities in Canada, that do not issue debt or publicly-traded equity, can elect to use. These standards are for private enterprises, meaning non-public companies. ASPE uses accrual-based accounting.

Under ASPE, revenues and expenses are recognized when the receipt of cash is earned or when expenses are incurred (used or consumed), reflecting the substance of the transaction rather than when the cash connected to the transaction changes hands. Therefore, Jump would recognize an amount owing on its financial statements to any vendor that has supplied Jump with an expense or asset for which Jump has yet to pay. Moreover, if a patron prepaid for their ticket, this amount would be recognized as a liability on Jump's financial statements until that patron actually used one of Jump's facilities; once this occurred, the amount would be moved out of the liability account and into revenue.

Although it is simpler and perhaps less costly to use the cash basis of accounting, the accrual method of accounting that ASPE employs generally provides a more accurate picture of the economic reality of a business. Should Jump need to provide its financial statements to users such as a bank (if financing is required), future franchise owners, or potential future buyers, ASPE would be preferred. Also, note that for tax purposes, cash-basis accounting is not permitted.

I recommend that you follow ASPE, which will result in financial statements that will be more accurate and more useful to all present and future users.

#### Impact on the 2019 Financial Statements

#### Revenue

Revenue should be recorded when Jump has performed its duties (allowed customers access to the trampoline park), as long as it is: measurable, which it is because we know the price is \$15 per hour; and collectible, which it is because customers either pay cash, use debit, or pay by credit card (which will be paid by the credit card company). Measurability may be in question if you are concerned about outstanding refunds, as I noticed refunds have been granted to some customers. However, that would normally happen on the same day, so there should be no potential refunds outstanding at year end.

This means that, even if not received at year end, any credit card receivables should be included in the 2019 income. For 2019, \$20,000 would be added to revenue.

#### Capital assets

You have expensed the full cost of the computer equipment, software and trampolines, but these will be used and consumed over time. These qualify as property, plant and equipment (PP&E): they are being used in the trampoline business operations for administrative purposes (computer equipment and software) or supply of services to customers (trampolines); are being used over more than one year (five, three and 10 years respectively); and are not for sale in the ordinary course of business (Jump offers customers the opportunity to jump on trampolines but does not sell trampolines, nor computer equipment or software). As such, these items should be set up as capital assets on the balance sheet and expensed, through depreciation, over their useful lives.

At this point, it is unclear whether the mats listed on the draft income statement constitute a capital asset. As it appears that they wear out much faster than the trampolines, these items may be properly classified as an expense. If they do not have a useful life of more than one year, expensing is appropriate. More information is needed in order to make a definitive conclusion.

#### Prepaid insurance

You have expensed the full amount of the insurance for each location when paid, but it covers a full year, and for some locations, was purchased partway through the year, meaning coverage still exists beyond December 31, 2019. The future insurance coverage that has already been paid for but not yet used qualifies as an asset. It represents a future benefit that Jump controls because a contract exists between Jump and the insurance provider, and the transaction has already occurred, i.e., the contract was signed and paid for earlier in 2019. An adjustment should be made to set up part of the insurance costs for the Hamilton and St. Catharines locations as prepaid insurance.

#### Payroll accrual

Employees were last paid for their work up to and including December 27, but as Jump is open every day of the year, employees worked from December 28 to 31. Therefore, as of December 31, Jump owes wages for this four-day period. A liability exists because Jump has an obligation to pay these employees, which it cannot avoid under labour laws, and the obligating event has already occurred, as the employees worked from December 28 to 31.

Assuming that you are paid on the same schedule as the rest of the employees, an accrual is also needed for your salary.

As such, a liability should be recorded with an offsetting entry to salaries and wages expense.

For Assessment Opportunity #1 (Financial Reporting), 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 difference between the cash basis of accounting and following ASPE, or the impact of moving from cash-basis accounting to accrual accounting on the income statement items.

**Competent** – The candidate discusses the difference between the cash basis of accounting and following ASPE, and the impact of moving from cash-basis accounting to accrual accounting on the income statement items.

**Competent with distinction** – The candidate discusses the difference between the cash basis of accounting and following ASPE, and the impact of moving from cash-basis accounting to accrual accounting, discussing several of the specific 2019 income statement items that would be affected.

#### **Assessment Opportunity #2 (Breadth Opportunity)**

The candidate discusses the advantages and disadvantages of paying a dividend instead of a salary, and the tax implications of retaining the money in the company.

The candidate demonstrates competence in Taxation.

#### **CPA Map Competencies:**

- 6.1.1 Discusses general concepts and principles of income taxation (Core Level B)
- 6.6.2 Analyzes income tax implications of compensation planning between a shareholder and a closely-held corporation (Core Level C)

#### Enabling:

- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

#### Salary versus Dividend

You asked about the advantages and disadvantages of paying yourself a salary or a dividend, and the option of leaving the money in the company.

A salary will provide a deduction in the calculation of corporate tax but will be taxed personally using the progressive tax brackets. Being paid a salary will necessitate payments (employer and

employee portions) into the CPP program, which will cost a maximum of around \$5,500 per year, depending on the salary, shared between you and Jump. However, you will receive payments from the CPP program later in life when you retire.

A salary will also create earned income, which will create RRSP room. This will allow you to put funds aside for your retirement and receive a tax deduction in the year of contribution. Funds invested in the RRSP will compound tax-free while in the plan. You will only be taxed on the original contribution and the investment income in the year of withdrawal, as other income.

A salary will also create earned income for childcare deduction purposes. If you have children and meet the other criteria for deducting childcare costs, being paid a salary will allow you to deduct childcare costs whereas being paid a dividend will not allow you the same deduction.

Dividends paid from the corporation are not deductible to the corporation, and will be subject to a gross up and a dividend tax credit when taxed personally. Dividends generally attract less tax at the personal level than a salary. Whether this nets to a greater or lesser amount of overall tax (combining personal plus corporate taxes) compared to a salary will depend on numerous factors, including: whether the dividend is eligible or other-than-eligible (you may surpass the small business deduction limit in the future, paying corporate tax at the high rate and thus creating a GRIP balance to pay eligible dividends); your personal tax bracket; the provincial tax rates; and the provincial dividend tax credits. In general, regardless of whether you are paid a salary or dividends, the total tax paid between the corporation tax and your personal tax should theoretically be the same.

The largest advantage of having an incorporated business is that you may leave money in the company for reinvestment in the business or for investment in passive investments, which can be withdrawn when you retire. This allows for a deferral of taxes. The corporation will pay tax at a relatively low rate (9% to 13%, depending on the province) on its business income. This leaves a higher portion of cash available for investment than if the amount were paid out to you as a salary or dividend, as the personal component of the tax would be deferred until a withdrawal is made.

The interest and capital gain income earned from passive investments will be considered property income, which may be subject to additional refundable tax (ART), creating an RDTOH balance. In that case, paying a dividend in order for the company to receive a dividend refund would be beneficial.

Paying a salary or a dividend does not have to be "all or nothing." You could pay yourself an annual salary large enough to qualify for the maximum CPP benefit when you retire, or a salary large enough to maximize the RRSP room, and then take any excess requirements for personal funds in the form of dividends, or leave the remainder in the company until you retire. As mentioned above, the combination that creates the least net tax depends on numerous factors and I would need more information in order to provide more specific guidance.

For Assessment Opportunity #2 (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 discuss the decision to pay a dividend instead of a salary or to retain the money in the corporation.

**Competent** – The candidate discusses the decision to pay a dividend instead of a salary or to retain the money in the corporation.

**Competent with distinction** – The candidate thoroughly discusses the decision to pay a dividend instead of a salary or to retain the money in the corporation.

#### **Assessment Opportunity #3 (Breadth and Depth Opportunity)**

The candidate analyzes the variances between the budgeted and actual operating income.

The candidate demonstrates competence in Management Accounting.

#### **CPA Map Competencies:**

3.2.3 Computes, analyzes, or assesses implications of variances (Level A)

#### Enabling:

- 2.1.2.4 Gathers additional relevant information, as needed, to explore unexpected or inconsistent findings
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences
- 2.1.4.3 Considers alternative interpretations of quantitative and qualitative information

	Actual	Note	Budget	1	/ariance
Sales					
Tickets	\$ 1,690,000	1	\$ 1,780,000	\$	(90,000)
Refunds	(24,815)	2	(35,600)		10,785
Cafeteria	206,222	3	275,000		(68,778)
	1,871,407		2,019,400		(147,993)
Expenses					
Advertising and promotion	61,922	4	115,000		(53,078)
Bank charges and interest	6,101	*	6,000		101
Cafeteria food	118,300	5	125,000		(6,700)
Computer equipment and software	23,440	*	24,000		(560)
Insurance	83,400	6	66,000		17,400
Office	9,753	*	9,000		753
Legal	32,877	7	5,000		27,877
Rent	190,000	*	190,000		0
Salaries and wages	1,056,500	8	1,009,600		46,900
Trampolines and mats	150,000	9	125,000		25,000
Utilities	24,543	10	 34,000		(9,457)
	 1,756,836		 1,708,600		48,236
Operating income	\$ 114,571		\$ 310,800	\$	(196,229)

<sup>\*</sup> Any variance below \$1,000 was deemed to be immaterial; therefore, no variance explanation was considered necessary.

#### Note 1 - Tickets

Jump's budgeted ticket sales were greater than the actual figure. There are a few potential reasons for this variance. First, you noted that during periods of cold and/or rain, Jump's facilities experience an increase in customers because people seek indoor activities when the weather is poor. However, in 2019, the weather was better than in 2018, which could explain why fewer patrons visited Jump's facilities and why tickets sales were therefore lower than expected.

It is also possible that, given the control deficiencies, such as patrons being marked with an "X" on their hand prior to entry, fewer ticket sales were recorded because more patrons entered the facility without paying. It is also possible that there were unrecorded cash sales. Given that no receipt is issued for cash sales, it is possible that an employee could pocket the cash and not record the ticket sale. As well, patrons may have realized that they only need to pay for one hour of time but can use the facilities for longer because of the control deficiencies related to duration of time rented. There is further evidence for this, given the number of mats that needed to be replaced during the year.

These all contribute to revenues being under budget.

In addition, since refunds are given through cash from the till without being recorded, the net ticket sales would be overstated by this amount.

#### Note 2 - Refunds

Fewer refunds were granted in the year than was initially budgeted. You commented that this is a good sign because customers must be happy with their experience at Jump. However, it is possible that employees are approving refunds but failing to record the transaction, as was observed during the site visit. This figure might be understated due to control deficiencies.

#### Note 3 - Cafeteria

Cafeteria sales were less than was budgeted. This variance appears to be as a result of the weather patterns discussed in Note 1. Because the weather was relatively nice in 2019, fewer people may have sought indoor activities, and therefore, there were fewer patrons who purchased food from the cafeteria. This is further evidenced by the decrease in the cafeteria food expense.

#### Note 4 – Advertising and Promotion

Less money was spent on advertising and promotion than was initially budgeted. The original budget was based on newspaper and radio ads. However, it appears that you reduced spending this year because you obtained a lot of exposure through social media.

#### Note 5 – Cafeteria Food

As discussed above, the cafeteria likely had fewer customers than was expected, given the nice weather, and as a result, less food was sold. However, this expense did not decline nearly as much as the cafeteria food sales. This could be because more food was purchased than was needed, and more food was therefore thrown out than anticipated.

#### Note 6 - Insurance

Jump's actual insurance expense was greater than the budgeted amount. For 2019, the Toronto location was quoted an annual premium of \$22,000. It appears that the budget was built off that figure (\$22,000 per location × 3 locations = \$66,000). However, the premium that Jump was charged on the two new facilities appears to be greater than \$22,000. As you mentioned, Jump's insurance premiums have increased each year since the company's inception. This could be as a result of the insurance company's risk assessment of Jump. As discussed in Note 7, the number of incidents at Jump appears to be increasing.

#### Note 7 – Legal

Legal fees were greater than was budgeted. Incident rates have increased since the opening of the two new facilities. Because you had to divide your time between all three facilities, this could be due to less overall governance. You did not hire a supervisor for each location until the end of the year. Prior to that, because of less oversight by you or a supervisor, it is possible that the facilities' safety standards were not adhered to as closely. As the number of incidents increased, so did the legal fees associated with customer complaints.

# Note 8 – Salaries and Wages

Toward the end of the year, when you realized that you were unable to provide adequate oversight to all three facilities without the help of a supervisor at each location, three supervisors were hired, one for each location. As this additional expense was not originally budgeted for, the actual expense exceeded the budget. To determine whether the variance is reasonable, more details are needed regarding the start dates and salaries of the supervisors.

## Note 9 – Trampolines and Mats

This variance appears to be tied to how many mats Jump needed to replace throughout the year. You commented that you were surprised by how many mats needed replacement, given the number of tickets sold. The mats wear out with use. This may indicate that the additional wear came from individuals who did not pay for their entry (see control discussion). Also, it was noted during the site visit that one family stayed for three hours while only paying for one, which would also cause additional wear on the mats.

#### Note 10 - Utilities

You mentioned that the weather in 2019 was better than in 2018. It is likely that Jump's utility bills were lower than anticipated because there were fewer costs associated with heating the facilities. However, more analysis would need to be completed before a definitive reason for this variance could be provided.

For Assessment Opportunity #3 (Management Accounting), 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 explain the variance between budgeted and actual operating income.

**Competent** – The candidate provides a reasonable explanation for the variance between budgeted and actual operating income.

**Competent with distinction** – The candidate provides an in-depth explanation for the variance between budgeted and actual operating income, and integrates aspects of the control deficiencies into the discussion.

# **Assessment Opportunity #4 (Breadth Opportunity)**

The candidate prepares a cash flow forecast for the franchise operations.

The candidate demonstrates competence in Finance.

## **CPA Map Competencies:**

- 5.1.2 Develops or evaluates financial proposals and financing plans (Core Level B)
- 5.2.1 Evaluates the entity's cash flow and working capital (Core Level A)

#### Enabling:

- 2.1.3.2 Determines whether precise calculations, estimates, forecasts, or projections are required
- 2.1.4.7 Explicitly articulates and justifies assumptions

I have forecast the cash inflows and outflows for the term of the bank loan. With the current franchising plan, there will be insufficient funds earned in upfront fees and royalty fees to cover the upfront costs and bank loan repayments and interest at the end of Year 1. Therefore, under the current plan, there may be a concern as to whether the bank loan repayment can be made. However, you could temporarily cover it with corporate funds or request a larger upfront loan from the bank, although this may not be your preference. Overall, the franchising plan looks profitable; however, Jump must first adequately address the best way to resolve the negative cash balance issue that would currently exist at the end of Year 1.

#### **Cash Flow Forecast**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Note
Cash, beginning of year	0	500,000	(175,610)	169,344	521,067	879,600	
Bank loan received (Appendix II) Principal repayments (Appendix II)	1,200,000	(240,000)	(240,000)	(240,000)	(240,000)	(240,000)	
Interest to pay (4%) Loan provided		(48,000)	(38,400)	(28,800)	(19,200)	(9,600)	1
<ul><li>– 10 locations opened</li><li>beginning of Year 1</li><li>– 10 locations opened</li></ul>	(700,000)						2
beginning of Year 2 Loan repayments		(700,000)					
(evenly over 10 years) Loan interest Royalties		70,000 35,000	140,000 66,500	140,000 59,500	140,000 52,500	140,000 45,500	3 4
<ul><li>10 locations opened</li><li>beginning of Year 1</li><li>10 locations opened</li></ul>		207,390	209,464	211,559	213,674	209,401	5, 6
beginning of Year 2			207,390	209,464	211,559	213,674	7
Cash flow for the year	500,000	(675,610)	344,954	351,723	358,533	358,975	
Cash, end of year	500,000	(175,610)	169,344	521,067	879,600	1,238,575	

#### Notes:

- 1. Outstanding balance at 4% interest
- 2. Assuming that the initial costs are incurred prior to the opening of the franchise locations:  $$70,000 \times 10 = $700,000$
- 3. Repaid evenly over 10 years
- 4. Outstanding balance at 5% interest
- 5. \$207,390 = [(365 days × 180 customers/day × 80% × 1 hour × \$15/hr) + (365 days × 180 customers/day × 20% × 2 hours × \$15/hr) + (\$200,000 in average cafeteria revenues) × 10 franchisees] × 1.5% royalty
- 6. 1% increase in Years 2, 3 and 4; 2% decrease in Year 5
- 7. 1% increase in Years 3, 4 and 5

For Assessment Opportunity #4 (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 prepare a cash flow forecast for the franchise operations.

**Competent** – The candidate prepares a cash flow forecast for the franchise operations and concludes on whether additional funding is required.

**Competent with distinction** – The candidate prepares a complete cash flow forecast for the franchise operations and concludes on whether additional funding is required.

## **Assessment Opportunity #5 (Breadth Opportunity)**

The candidate discusses the risks associated with the draft franchise agreement and suggests revisions.

The candidate demonstrates competence in Strategy and Governance.

### **CPA Map Competencies:**

- 2.3.3 Evaluates strategic alternatives (Core Level B)
- 2.5.1 Designs an effective risk management program and evaluates its impact on shareholder value (Core Level B)

#### Enabling:

- 2.1.4.1 Explores potentially viable solutions or conclusions
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications

I have noted some concerns regarding the franchising arrangements that the entrepreneur proposed.

#### **Liability Risk**

The proposed agreement specifies that Jump will arrange, and pay for, all insurance and any litigation that arises in relation to the new franchise location. The agreement also specifies that

Jump will provide 48-hours' notice before any site visits, and that the franchisee will be responsible for compliance with all safety regulations.

This is a risk because, if the franchisee does not provide an adequately safe facility, Jump could be held legally responsible for any injuries or compliance violations. In addition, under the proposed agreement, Jump would be unable to visit the franchisee's location to ensure safety compliance without advance notice. This aspect of the agreement puts Jump's reputation and finances at risk.

The draft franchise agreement should be revised so that Jump and any franchisee agree to a suitable level of insurance before the new facility opens. I would also suggest that the franchisee either pay for their own insurance in full or that an equitable split of this cost be agreed to. I would also recommend that the "48-hours' notice" clause be eliminated from the draft agreement. To verify whether the franchisee is adhering to all safety and compliance standards, Jump should be able to visit any of its franchised locations without advance notice. Jump may also want to consider including a term that would allow Jump to sanction any franchisee that violates Jump's standards of safety, compliance and operation.

## **Marketing and Brand Recognition**

The proposed agreement specifies that the franchisee will have control of all marketing initiatives, yet Jump will be responsible for reimbursing the franchisee for these costs. There are two significant issues with this.

First, Jump would partially lose control over its brand because the franchisee would be able to use Jump's name in any kind of marketing initiative. This could result in harm to Jump's brand. Second, without a limit on the costs that Jump will reimburse, the franchisee may overspend.

The draft franchise agreement should be revised so that Jump retains control of all marketing initiatives. This will eliminate the risk that Jump's brand is adversely affected by marketing initiatives that do not align with the company's values and interests. Second, the expense aspect of these marketing initiatives should be refined to specify exactly how much marketing Jump will pay for. To reduce the chance of future conflicts with the franchisee, this item of the agreement should be as specific as possible.

## **Expansion Restrictions**

The proposed franchise agreement is also very prohibitive relative to Jump's future expansion options. The draft agreement specifies that Jump will not open another location within 300 kilometres of the franchisee's location. This is a vast distance and could eliminate the potential to open an additional location within a thriving market. For example, if this new location was opened in Ottawa, no other locations could be opened within the city, even if a market existed for one. The agreement also specifies that the franchisee will have the right of first refusal on future franchises. Again, this is very restrictive from Jump's perspective; if Jump were to find a potential new franchisee, this aspect of the proposed agreement may prohibit that arrangement.

I recommend that the "right of first refusal" clause be limited to only include the market that the franchisee currently operates in. For instance, if a franchisee had a location in Ottawa, the clause could be revised to: "the franchisee has the right of first refusal for any and all additional locations in Ottawa."

I also recommend that the area under restriction be reduced to perhaps 30 kilometres. Moreover, the agreement should specify that Jump may be allowed to expand within the restricted area if Jump can adequately prove that an independent market exists for the proposed facility.

## **Autonomy**

There are several clauses within the draft franchise agreement that provide the franchisee with a high degree of autonomy relative to important decisions that could affect Jump.

First, the draft agreement specifies that the franchisee will rent their own premises at a site of their choosing. This means that, even if the site and/or facility chosen did not adhere to Jump's standards or Jump's vision for how the company should operate, Jump would be unable to reject a franchisee's plan. This clause should be rewritten to specify that both the location and the facility need to be agreed upon by both the franchisee and Jump prior to the agreement being finalized.

Next, the draft agreement currently stipulates that the franchise can be sold at the sole discretion of the franchisee. Again, this clause limits Jump's ability to govern its own company. If this clause remains in the agreement, Jump would be unable to veto the sale of a franchise, even if the terms of the sale did not adhere to Jump's goals and vision, for instance, if a franchisee wishes to sell a location to a party that Jump does not want to work with. This clause should be revised so that any potential sale of a franchise must be approved by Jump, and only after Jump has been granted the chance to perform all the due diligence that it deems relevant.

Finally, the draft agreement states that the franchisee will be responsible for compliance with all safety regulations. Given this clause, there is a risk that the franchisee will not adhere to these rules; in the event that the franchisee violates these standards (e.g., if the franchisee was found to be negligent toward patron safety), there is a risk to the company's reputation as well as the potential for litigation. This clause should be revised to state that both Jump and the franchisee are responsible for compliance and safety, and that each party will transparently work together to ensure that these standards are upheld.

#### Recommendation

As it currently stands, the draft franchise agreement requires significant revision; all the clauses specified benefit the franchisee and could cause harm to Jump's ability to govern the company and operate in the manner that you would like.

For Assessment Opportunity #5 (Strategy and Governance), 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 risks associated with the draft franchise agreement or suggests revisions.

**Competent** – The candidate discusses some of the risks associated with the draft franchise agreement and suggests revisions.

**Competent with distinction** – The candidate discusses several of the risks associated with the draft franchise agreement and suggests revisions.

# **Assessment Opportunity #6 (Breadth Opportunity)**

The candidate discusses the control weaknesses and provides recommendations to address them.

The candidate demonstrates competence in Assurance.

## **CPA Map Competencies:**

- 4.1.1 Assesses the entity's risk assessment processes (Core Level A)
- 4.1.2 Evaluates the information system, including the related processes (Core Level B)

#### Enabling:

- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions

#### Till Keys

Weakness: The key to each till is kept beside it, which means that the till can be opened at any time by anyone without entering a transaction.

Implication: The fact that the till can be opened without entering a transaction in the POS terminal makes reconciling the cash in the till to the actual transactions virtually impossible. If theft of cash were to occur, it could not be detected; the cashier could say that a refund transaction was not entered in the till, and the key was instead used to open the till in order to give the refund. In the scenario witnessed, an employee provided a refund to a customer, using the key to access the

cash drawer; the refund was likely not recorded in the system, so the cash in the till would not match the sales records of the POS terminal.

Recommendation: The key to the till should not be kept beside it but should be kept with you, the supervisor or whoever is in charge. All transactions need to be entered into the system (sale or refund) for the cash drawer to open.

#### **Refund Approval**

Weakness: Jump's policy is to refund for sickness, accidents or unsatisfied customers who leave before using half of their paid time. These conditions are somewhat subjective, particularly since you have no way of tracking when a customer leaves before using half of their paid time. A refund was provided to a customer who had a crying child, directly by the cashier, without any approval from you or the supervisor, and without any documentation.

Implication: The refund provided may not have been appropriate in the circumstances. This may result in additional expenses for Jump that may not have been required.

Recommendation: Given the nature of the business, it would be more appropriate if you or a supervisor were brought forward to deal with customers requesting a refund, and approve the refund. In addition, a clear refund policy should be in place for the employees and should be clearly visible to all customers.

# **Evidence of Payment**

#### **Entrance**

Weakness: Customers who have paid are marked with an "X" on the back of the hand with a marker.

Implication: Customers could easily mark their own hands with an "X" and enter the trampoline park without paying.

Recommendation: Receipts should be provided at the POS terminal for all sales, which should be used by the customers as proof of payment to enter the trampoline park. Alternatively, Jump could use a unique stamp so that customers could not easily replicate it and enter the park without paying.

#### Duration

Weakness: There is currently no way to tell how long a customer has paid for, and how long the customer has already used the facilities.

Implication: Customers may actually spend more time at the facilities than they have paid for. Recommendation: The expiry time for each customer needs to be visible somehow to the employees on the floor, so they know when customers need to leave. Customers could be made to wear a sticker with the expiry time visible. This could be issued as part of the receipt process.

Alternatively, the exit could be controlled by having customers show their receipts or wristbands (which would indicate the time they entered); if they exit later than the time they paid for, customers could be charged for the extra time. To minimize disputes, this policy should be clearly explained upon entry.

#### **Cash Handling**

# Lack of receipts for cash payments

Weakness: Receipts are not printed from the POS terminal for customers who pay cash (the system only generates receipts for debit or credit transactions).

Implication: Because customers do not get a receipt, staff could pocket the cash received and never enter the sale in the system. As the sale is not recorded in the POS terminal, reconciling the cash in the till to recorded transactions would never detect the theft.

Recommendation: Receipts should also be provided to customers who pay cash. This would help ensure that the transaction is entered in the POS system, which makes it more difficult for staff to steal cash, assuming that the cash reconciliation controls discussed below are also implemented.

### Reconciliation

Weakness: Cash is not counted and reconciled to the transactions logged in the POS terminal when employees change shifts.

Implication: If cash were to be stolen or if an employee made a mistake in collection of entrance fees from a customer, or in the change/refund given back to a customer, it would be impossible to tell which employee was responsible.

Recommendation: At each shift change, a report should be run from the POS terminal, indicating cash sales, debit/credit sales and refunds provided. The amount of cash sales less cash refunds should be reconciled to the cash amount in the tray (above the original float amount). At the beginning of a shift, each employee should only have the float amount in the cash tray.

#### Cash collection

Weakness: The cash is only collected from the cash trays at night.

Implication: By the end of the day, there is a lot of cash in the cash trays (around \$2,000) and it is much more susceptible to theft in the tray than it would be in the safe, particularly since the key to the tills is readily available.

Recommendation: Cash in the cash trays should be kept to a minimum. When the amount of cash in the tray reaches a significant amount, such as \$500, a transfer of the cash to the safe should be performed. The amount of cash moved to the safe throughout an employee's shift should be

kept track of (by the POS terminal if possible), so it is accounted for as part of the reconciliation of cash to sales. The only people with access to the safe should be you and the supervisors.

### Bank deposits

Weakness: While it is good that you are making the deposits rather than the employees collecting the cash, bank deposits are only made weekly.

Implication: Although the cash is kept in a safe, it would still be safer to have it in a bank, to protect it from theft, fire or a natural disaster. In addition, putting the cash in the bank more frequently may result in maintaining a higher balance, which could lower bank fees or increase interest earned on the balance.

Recommendation: With \$2,000 in cash collected daily, cash deposits at the bank should be made daily. Even if after hours, banks have night drop boxes for businesses.

#### Petty cash

Weakness: When the cafeteria ran out of a supply (coffee), cash from the till was used by an employee to purchase more.

Implication: It is possible that the coffee expense was incorrectly accounted for as a result of this informal treatment, and reconciling the cash balance could become more difficult.

Recommendation: A separate petty cash fund could be used for emergency purchases such as the one described, with the receipt for the item put into petty cash, along with any change. A petty cash fund limits the amount of cash that is available to staff, and the requirement to put the receipt into petty cash helps ensure that the expenses are recorded. The petty cash fund should be reconciled and replenished periodically by you or the supervisor.

#### Inventory

## **Tracking**

Employees seem to be following the policy of throwing out perishable food when it is past the expiry date; however, on several occasions, they had too much food and had to throw it out.

Weakness: There appear to be issues with inventory management; there are indications of running out of inventory at times and having to throw out extra food at other times.

Implication: Either product is wasted or there is insufficient product, resulting in Jump running out, or being unable to make sales.

Recommendation: To help track inventory better, you could see if the accounting software you are using has an inventory module that could be purchased. In addition to physical inspections of the stock, you could use the system to see when inventory gets low and needs to be reordered.

The module may even be able to provide alerts when inventory reaches a certain level for each item, triggering the need for an order.

For Assessment Opportunity #6 (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 identifies some of the control weaknesses and provides recommendations to address them.

**Competent** – The candidate discusses some of the control weaknesses and provides recommendations to address them.

**Competent with distinction** – The candidate discusses several of the control weaknesses and provides recommendations to address them.

<u>Case #2</u> (Suggested time: 90 minutes)

Festival Inc. (FI) was incorporated by Juan Rivera on May 1, 2019. Juan is a Canadian resident and this is his first business. FI has an April 30 year end and reports under ASPE. FI hosts a month-long food festival every July at a waterfront park that it rents from the city. FI's website states: "FI brings people together to enjoy and celebrate the things that connect us—food, drink and music."

The first FI festival was a success as the weather was superb, allowing musical acts to play on the waterfront stage every day and night. The July 2019 festival had 40 vendor sites for trucks offering a wide variety of food, soft drinks and alcoholic beverages. Vendor trucks could participate for the full month or for only part of it. In 2019, a total of 65 vendors participated.

It is now February 2020. You, CPA, have been engaged by Juan as an advisor.

Several vendors did not think the 2019 fees they were charged were fair. As the festival's success depends on retaining quality vendors, who are in high demand, this is a major issue. The current fee structure has two components—one is based on recoverable costs and the other is a percentage of vendor's gross sales (Appendix I). Juan has asked for recommendations that will improve the recoverable cost allocation, but he will not accept any reduction in the total fees collected by FI. He would like to understand how your recommendations would have affected a couple of the 2019 vendors.

Juan is also considering adopting a fee structure based purely on a percentage of vendors' gross sales. He would like to know what percentage of a vendor's gross sales he would have had to charge in 2019 to get the same revenue. He also wonders whether you think this change in fee structure would be suitable for FI, and asks you to explain why.

In 2019, Juan loaned FI cash for it to pay its bills, because they were due before FI had collected the majority of revenue from the vendors. Juan wants advice on how to better manage cash flows. A friend suggested that he obtain a personal line of credit against the equity in his home.

Juan would like either a compilation or a review engagement performed on FI's financial statements. Moreover, vendors have expressed interest in seeing FI's financial statements, to understand the recoverable costs. Juan asks about the difference between the two types of engagements, which one he should choose and if you could perform that work.

Juan launched the festival without much thought about risk management. He asks you to point out any business risks that you identify, and to suggest a risk management approach for each.

To process customer payments, FI recently bought a licence to use software called SwiftPay (Appendix II). The festival vendors currently only accept cash payments, which has resulted in some vendors understating their true sales figures in order to pay lower vendor fees. However, next year, all vendors will be required to use SwiftPay and will not be allowed to accept cash. Juan would like advice on the accounting treatment of the costs incurred related to SwiftPay.

Juan has estimated FI's taxes payable for the year ending April 30, 2020 (Appendix III). He asks you to revise his estimate.

# APPENDIX I FEE STRUCTURE DATA

Both vendor fee components were billed in August. A summary of the festival's revenue is as follows:

			Note
Customer admission fees		\$ 625,000	
Vendor fees:			
Recoverable cost	\$ 1,625,000		1
Percentage of gross sales	750,000		2
Total vendor fees		 2,375,000	
Total revenue		\$ 3,000,000	

#### Notes:

1. All sites were occupied at all times but some vendors did not participate for the whole month. Each of the 65 vendors was charged \$25,000. The recoverable cost fee was intended to recover the costs directly related to the vendors, and is comprised of the following expenses:

Activity	Amount	Factors influencing each activity
Vendor support	\$434,000	Hours of support provided
Cleaning and maintenance	\$389,500	Square footage cleaned
Marketing and promotions	\$326,250	Number of times FI promoted a vendor
Site security	\$475,250	Number of security incidents at vendor sites

2. The percentage of gross sales applied in 2019 was 5% of the vendors' gross sales, and gross sales totalled \$15 million.

One vendor told Juan that, since their allocated space was significantly smaller than that of the neighboring vendor, they did not understand why they had to pay the same \$25,000.

During the 2019 event, 550,000 square feet were cleaned each day, 500 security incidents occurred, 237 vendor promotions were done and 4,010 hours of vendor support was provided.

Juan collected the following information on two 2019 vendors:

	Pizza JoJo's	Smooth Treats
Total square feet occupied	40,000	12,000
Length of stay	31 days	14 days
Vendor support hours	40	10
Number of promotions	3	1
Number of security incidents	10	3
Gross sales	\$590,000	\$240,000

# APPENDIX II DETAILS OF SWIFTPAY

SwiftPay, which was created in 2013, allows a festival operator to access sales data for all participating vendors in real time. However, each vendor can only access their own data. Should the festival operator experience problems, SwiftPay's IT department will respond within 48 hours.

SwiftPay automatically withholds the percentage of gross sales fees owed to the festival operator by vendors and deposits the amount into the operator's bank on a weekly basis. Customer payment is restricted to debit and credit cards.

On January 5, 2020, FI paid \$65,000 to purchase 45 tablets, to be provided to vendors each year during the festival in order to use SwiftPay. On February 1, 2020, FI paid \$75,000 for a licence to use the software and for software updates for the next three years. On that day, the software company visited FI's office and tested and tailored SwiftPay to meet FI's specific needs, at a cost of \$5,000. The software was immediately ready for use.

# APPENDIX III ESTIMATE OF CORPORATE TAXES PAYABLE

Revenue       \$ 3,000,000         Expenses       (2,875,000)       1, 2         Net income       125,000         x 38%       3    Taxes payable \$ 47,500				Note
Net income 125,000 × 38% 3	Revenue	\$ 3	3,000,000	
<u>× 38%</u> 3	Expenses	(2	2,875,000)	1, 2
	Net income		125,000	
Taxes payable \$ 47,500			× 38%	3
Taxes payable \$ 47,500				
	Taxes payable	\$	47,500	

#### Juan's Notes:

- 1. As there are two months remaining in the fiscal year, total expenses are an estimate and include other festival-related costs in addition to those that are recoverable from vendors.
- 2. Expenses of \$2,875,000 include the following amounts:
  - a) All costs related to the purchase and testing of SwiftPay.
  - b) Depreciation expense of \$5,000 for furniture and fixtures acquired during the year at a cost of \$25,000.
  - c) Meals and entertainment of \$6,500, including a picnic hosted in August 2019 for all employees, which cost \$2,500.
  - d) Fines of \$4,000 for failing to meet health and safety inspection requirements. Most of the fines resulted from contaminated food sold by one of our vendors. One visitor to the festival even became seriously ill as a result and had to be hospitalized.
  - e) Extra supplies inventory currently stored, for use at the 2020 festival. I bought too much, although I have not yet figured out how much.
- 3. I found the 38% base rate on the CRA website.

# MARKING GUIDE 3-2 FESTIVAL INC. (FI) ASSESSMENT OPPORTUNITIES

To: Juan Rivera

From: CPA

Subject: Advice regarding Festival Inc. (FI)

## **Assessment Opportunity #1 (Depth and Breadth Opportunity)**

The candidate recommends ways to improve the recoverable cost allocation to vendors.

The candidate demonstrates competence in Management Accounting.

#### **CPA Map Competencies:**

3.3.2 Evaluates and applies cost management techniques appropriate for specific costing decisions (Core – Level B)

#### Enabling:

- 2.1.1.2 Divides larger problem into appropriate sub-problems to facilitate analysis
- 2.1.3.4 Chooses and applies appropriate analysis techniques
- 2.1.4.1 Explores potentially viable solutions or conclusions
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences
- 2.1.4.7 Explicitly articulates and justifies assumptions

Having analyzed the information you provided, I am suggesting a new allocation for the recoverable costs that are charged back to vendors, one that I believe is fairer to the vendors and will not reduce the fees collected by FI.

Currently, all vendors are charged an equal amount of certain costs that are incurred by FI. These costs totalled \$1,625,000 in 2019 and included the following categories of expense: vendor support; cleaning and maintenance; marketing and promotions; and site security. In 2019, each of the 65 vendors was charged an equal share of the costs, which equated to \$25,000. As vendors use these services in varying amounts, certain vendors do not see this as equitable. For example, a larger site would require more cleaning and maintenance services than a smaller site. In addition, some vendors attend for the full month while others only attend for a portion.

Since FI collected good data at the 2019 Festival, this information can be used to allocate costs in a more meaningful and equitable way. The activities that drive the costs charged to the vendors have been identified and activity levels tracked. This presents an opportunity to use activity-based costing (ABC) to assign fixed fees to vendors. This will ensure that fees charged correlate with usage of services.

The first step is to calculate the activity rates to use in allocating the recoverable costs to be charged to the vendors.

Activity	Amount	Activity Level	Rate
Vendor support	\$434,000	4,010 hours	\$108 per hour
Cleaning and			\$0.71 per sq. ft. cleaned
maintenance	\$389,500	550,000 sq. ft. cleaned daily	for 31 days
Marketing and			
promotions	\$326,250	237 promotions	\$1,377 per promotion
Site security – Note 1	\$475,250	500 incidents	\$951 per incident

Note 1 – I allocated the costs related to the site security based on a rate per incident. However, if you think that the number of incidents happening at each booth is not related to the booth itself, it might be better to allocate these fees based on the number of days of attendance of each vendor.

The impact of this method of allocating fees to support the recoverable costs charged can be illustrated by using the customer data provided for two of the Festival's vendors.

Pizza JoJo's		Fee
Total square feet cleaned	40,000 sq. ft. × \$0.71 per sq. ft.	\$28,400
Length of stay	31 days	
Vendor support hours	40 hours × \$108 per hour	4,320
Number of promotions	3 promotions × \$1,377	4,131
Number of security incidents	10 incidents × \$951	9,510
		\$46,361

Based on applying the rates, Pizza JoJo's would have a recoverable cost fee of \$46,361, which is \$21,361 more than the \$25,000 fee it was charged in 2019. The revised fee is more reflective of the activity experienced at the site. This could encourage vendors to take steps to reduce the costs incurred. For example, vendors could increase controls in order to reduce security incidents, and/or could request fewer promotions and instead market the stall themselves.

Smooth Treats		Fee
Total square feet cleaned	12,000 sq. ft. × \$0.71 per sq. ft × 14/31 days	\$3,848
Length of stay	14 days	
Vendor support hours	10 hours × \$108 per hour	1,080
Number of promotions	1 promotion × \$1,377	1,377
Number of security incidents	3 incidents × \$951	2,853
		\$9,158

Based on applying the rates, Smooth Treats would have a recoverable cost fee of \$9,158, which is \$15,842 less than the \$25,000 fee it was charged in 2019, and reflects the fact that Smooth Treats was only at the Festival for 14 of the 31 days and had a smaller site.

It is likely that Smooth Treats would find this allocation fair, but Pizza JoJo's might not agree; even though the revised allocation is more reflective of Pizza JoJos' use of services, it is paying more overall.

For Assessment Opportunity #1 (Management Accounting), 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 recoverable cost fee to be charged to the vendors using activity-based costing.

**Competent** – The candidate calculates the recoverable cost fee to be charged to the vendors using activity-based costing and discusses the impact of the new allocation on the example vendors.

**Competent with distinction** – The candidate thoroughly calculates the recoverable cost fee to be charged to the vendors using activity-based costing and discusses the impact of the new allocation on the example vendors.

# **Assessment Opportunity #2 (Depth and Breadth Opportunity)**

The candidate discusses whether a fee structure purely based on a percentage of a vendor's gross sales would be suitable for FI and calculates the percentage that FI would have had to charge in 2019 to get the same revenue as with the current allocation.

The candidate demonstrates competence in Management Accounting.

## **CPA Map Competencies:**

- 3.3.1 Evaluates cost classifications and costing methods for management of ongoing operations (Core Level A)
- 3.3.2 Evaluates and applies cost management techniques appropriate for specific costing decisions (Core Level B)
- 3.4.1 Evaluates sources and drivers of revenue growth (Core Level B)

#### Enabling:

- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences
- 2.1.4.6 Extends analyses beyond immediate, short-term effects to evaluate longer-term, indirect implications

Juan, you are considering charging vendors a fee based solely on a predetermined percentage of gross sales. You made it clear that the total fees charged under a new fee structure cannot result in lower fee revenue than in 2019. Therefore, if FI were to lose the recoverable cost fees of \$1,625,000, this would have to be made up through this new fee structure. The 2019 gross revenues reported by vendors was \$15 million. The rate on gross sales would have to more than triple in order to collect the required fees (\$1,625,000/\$15,000,000 = 10.83%.) This would bring the variable rate to 15.83% (10.83% + current 5%).

#### **Advantages** of this change are as follows:

- Vendors may consider this arrangement less risky as the fees would directly correlate with their sales revenues. There would no longer be the risk to the vendor of having low sales while still being required to pay a large fee to FI. This may attract more vendors to FI, or at least allow FI to retain vendors who were concerned with high fixed costs, which is important to FI's success.
- As the recoverable cost fee is not collected until the end of the Festival and the percentage of
  gross sales fee will be deposited regularly throughout the Festival, using the SwiftPay system,
  this would speed up cash collection. This will help FI with cash flow management.

#### **Disadvantages** of this change are as follows:

- A fee structure based solely on a percentage of vendors' gross sales increases the financial
  risk to FI of an unsuccessful festival. For example, if poor weather or a competing festival
  results in a decrease in revenues, FI's profitability would suffer more than if there was a
  recoverable portion that covered at least some of the fixed costs.
- A purely variable fee structure disregards the activities that are driving costs. Because some vendors are contributing more to costs, a purely variable fee structure could be perceived as unfair. The variable fee structure does not allow for the vendor-specific costs to be allocated to the vendors in an equitable manner.
- The structure would, in general, displease those vendors with higher revenues and would please the lower-revenue vendors.

The impact of moving to a variable-only structure can be illustrated by comparing two of the Festival's vendors.

Pizza JoJo's		
Saved recoverable cost fee		(\$25,000)
Additional variable fee	10.83% × \$590,000	\$63,897
Additional fees if moved to 100% variable		\$38,897

Smooth Treats		
Saved recoverable cost fee		(\$25,000)
Additional variable fee	10.83% × \$240,000	\$25,992
Additional fees if moved to 100% variable		\$ 992

It is unlikely that this change would make Pizza JoJo's happy but Smooth Treats is likely to be indifferent. Essentially, anyone earning over \$230,840 (\$25,000/10.83%) will have to pay more. Given that you want the Festival to be successful and generate healthy revenues, it would not be prudent to hurt the high-revenue vendors.

#### Recommendation

Changing to a fee structure based solely on vendors' gross sales is not fairer and is unlikely to make the vendors happier overall. The vendors did not object to a fee with a recoverable cost and a percentage of gross sales component. Rather, their comments seem to imply that they want the recoverable cost component to be allocated on a more equitable basis. Changing the recoverable cost fee to be based on the use of services, such as cleaning and security, as discussed previously, will be fairer to vendors.

For those vendors who perceive paying a recoverable cost fee as a disadvantage, you could explain that the cleaning, security, promotional and other services provided by FI are covering costs that the vendor would have incurred otherwise, had the support not been there to help vendors.

For Assessment Opportunity #2 (Management Accounting), 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 considerations around using a fee structure based purely on a percentage of vendors' gross sales or calculates the percentage that FI would have had to charge in 2019 to collect the same revenue as with the current allocation.

**Competent** – The candidate discusses the qualitative considerations around using a fee structure based purely on a percentage of vendors' gross sales and calculates the percentage that FI would have had to charge in 2019 to collect the same revenue as with the current allocation.

**Competent with distinction** – The candidate thoroughly discusses the qualitative considerations around using a fee structure based purely on a percentage of vendors' gross sales, and calculates the percentage that FI would have had to charge in 2019 to collect the same revenue as with the current allocation.

## **Assessment Opportunity #3 (Breadth Opportunity)**

The candidate discusses how to better manage cash flows.

The candidate demonstrates competence in Finance.

## **CPA Map Competencies:**

5.2.1 Evaluates the entity's cash flow and working capital (Core – Level A)

5.2.3 Evaluates sources of financing (Core – Level B)

## Enabling:

2.1.6.2 Uses brainstorming or other techniques to search for alternatives, issues, perspectives, and implications not already identified

In 2019, you had to loan FI cash in order for it to pay its bills. This is because costs are incurred during the planning and execution phase of the Festival and the main source of revenue (vendor fees) is not collected until August, when the Festival has ended. This is not a prudent approach to cash flow management.

Ways to address this cash flow / working capital challenge are as follows:

- Change the timing of cash collection from vendors. With the adoption of SwiftPay, fees
  associated with vendors' gross sales will be collected in July on a weekly basis, which will
  speed up collections.
- Change the timing of collection of the recoverable cost fees from vendors. Currently, 100% of the recoverable cost fee is charged in August, once actual costs are known. However, it seems reasonable to charge a portion of recoverable cost fees in advance of the Festival. I recommend that 50% of the recoverable cost fees be charged before the Festival starts. This portion could be based on budgeted costs and, in August, the remaining portion charged would reflect any adjustment needed to reflect actual costs. The earlier payment could be due at the time the vendor signs a contract with FI, or at a minimum, one month in advance of the Festival start date.
- Offer a discount to vendors willing to pay 100% of the recoverable cost fee in advance of the Festival start date. This cost could be offset by savings of interest on other forms of financing that would be required to bridge the period of cash flow shortfall.
- Avoid unnecessarily stockpiling supplies (you indicated that you had over-purchased supplies
  inventory and will have some left) and try to operate on a just-in-time basis, getting suppliers
  to make smaller shipments during the Festival if possible, as long as it does not increase the
  cost. This will help limit cash flow tied up, for example, in cleaning and office supplies.
  Receiving some of the supplies later will also extend the time until payment is due, thereby
  extending those payments into August, when your cash flow should be better.

Your friend's suggestion of obtaining a personal line of credit against your home equity is not an alternative that I would recommend. This puts your personal assets at risk. FI is a profitable company and, as it is a separate legal entity, can seek financing separate from you. If the cash management measures listed above are not sufficient to cover your cash flow needs, financing should be sought from a traditional lender such as a bank. An operating line of credit would be helpful in bridging temporary cash shortages. I recommend that you approach a bank as soon as possible to explore options. At that time, inquire as to whether a report/engagement from an audit firm would be required.

For Assessment Opportunity #3 (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 provide some cash flow management options.

**Competent** – The candidate provides some cash flow management options.

**Competent with distinction** – The candidate provides several cash flow management options.

# **Assessment Opportunity #4 (Breadth Opportunity)**

The candidate discusses the difference between a compilation and a review engagement, recommends one and discusses whether CPA can perform the work.

The candidate demonstrates competence in Audit and Assurance.

## **CPA Map Competencies:**

- 4.2.1 Advises on an entity's assurance needs (Core Level B)
- 4.3.1 Assesses issues related to the undertaking of the engagement or project (Core Level B)

#### Enabling:

- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

First, I will explain the difference between a compilation and a review engagement. We will then go over the users of FI's financial statements to see which type of engagement would best suit their needs, and I will discuss whether I am able to do the work.

# **Applicable Standards**

You have indicated that the financial statements will be prepared in accordance with ASPE. However, in a compilation engagement, the financial statements need not necessarily be in accordance with generally accepted accounting principles, but under a review engagement, they must be in accordance with either ASPE or IFRS. In your case, although you plan to have your financial statements prepared in accordance with ASPE, if you were to get a compilation engagement done instead of a review engagement, you would not have to worry about the note disclosure and might benefit from having some flexibility in how to account for certain transactions.

#### **Degree of Assurance**

In a review engagement, the practitioner expresses a conclusion that is designed to enhance the degree of confidence of the users regarding the preparation of an entity's financial statements in accordance with an applicable financial reporting framework (ASPE, in your case). The practitioner's conclusion is based on obtaining limited assurance about whether the financial statements, as a whole, are free from material misstatement. A conclusion will be issued on whether anything has come to the practitioner's attention that causes the practitioner to believe the financial statements are not prepared, in all material respects, in accordance with an applicable financial reporting framework.

A compilation engagement will not result in the expression of any assurance on the financial statements. The practitioner simply receives information from the client and arranges it into the form of a financial statement. The practitioner is only concerned that the assembly of information is arithmetically correct and is not false or misleading.

#### Type of Work and Fees

In a review engagement, the practitioner primarily performs inquiry and analytical procedures, to obtain enough appropriate evidence to form a conclusion on the financial statements. Analytical procedures consist of an evaluation of financial information through analysis of plausible relationships among both financial and non-financial data. When necessary, the practitioner will investigate identified fluctuations or relationships that are inconsistent with other relevant information, or that differ significantly from expected values.

In a compilation engagement, the practitioner is not required to make inquiries or perform other procedures to verify, corroborate or review information provided. On occasion, however, the practitioner could become aware of matters that they believe would cause the financial statements to be false or misleading. In this case, additional or revised information could be requested.

Due to the very limited work performed in a compilation engagement, the fees are lower for a compilation engagement than for a review engagement.

#### Users

In order to determine whether a compilation or a review engagement is better in your situation, we need to identify the users of the financial statements.

For now, the CRA is the main user of the financial statements, as the financial statements are used to prepare your tax return. You are also a user of the financial statements, as they would provide summary information on the performance of the Festival, which you would be interested in. The vendors are also users of your financial statements, since the fixed fees they are charged are based on the recoverable costs from the Festival. They will use the financial statements to ensure that their share of the recoverable costs is reasonable.

#### Recommendation

Because the vendors will have an interest in your financial statements, I recommend that you choose a review engagement, as it will provide a higher (although still limited) degree of assurance to those vendors that the recoverable costs are not materially misstated. In the future, should you choose to use a variable fee structure only, a compilation engagement might be sufficient.

# Independence

CPAs who perform professional services are required to follow rules related to their independence from their client. For a review engagement, both independence of mind and independence in appearance are required. Therefore, I would not be able to perform the review engagement. This is because I am providing advice to you on other matters, which would cause a self-review threat. However, I would be able to perform a compilation for you, since the independence rules do not apply to compilation engagements. If I perform a compilation for you, disclosure of the fact that I have provided advice to you on other matters would be required.

For Assessment Opportunity #4 (Audit and 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 difference between a compilation and a review engagement or the independence rules.

**Competent** – The candidate discusses the difference between a compilation and a review engagement and addresses the independence rules.

**Competent with distinction** – The candidate discusses the difference between a compilation and a review engagement, recommends one and addresses the independence rules.

## **Assessment Opportunity #5 (Breadth Opportunity)**

The candidate discusses business risks and suggests a risk management approach for each.

The candidate demonstrates competence in Strategy and Governance.

#### **CPA Map Competencies:**

2.5.1 Designs an effective risk management program and evaluates its impact on shareholder value (Core – Level B)

#### Enabling:

- 2.1.1.3 Exercises judgment in determining whether an issue requires attention
- 2.1.4.2 Analyzes cause-and-effect relationships and makes logical inferences
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions
- 2.1.6.2 Uses brainstorming or other techniques to search for alternatives, issues, perspectives, and implications not already identified

The following steps should be taken to address the business risks associated with the festival that I have identified.

**Risk 1 –** Vendors might continue to accept cash and not report the sales, resulting in lower variable fees being collected.

It seems likely that there will be some instances of vendors accepting cash and not reporting it, and therefore not paying the 5% commission on these gross sales. To reduce the risk, the following measures should be in place:

- Contracts between FI and the vendors should specify that payments must be processed via the SwiftPay app and clearly state that cash payments are not acceptable.
- Random visits to vendors should be made by FI, to observe whether cash is being used.
- Signs could be posted, informing patrons that cash is not accepted, which would incite vendors not to use cash.

Having put controls in place with SwiftPay in order to reduce this risk to the lowest degree possible, FI will have to accept this risk to some degree.

**Risk 2 –** Given the high demand for food trucks, FI might fail to attract vendors, or might lose existing vendors, if the terms of the agreement are not sufficiently attractive.

This risk is significant because the Festival cannot succeed without high-quality vendors. In order to address this risk, FI must continue to evaluate the vendors' and customers' experiences.

The Festival was successful in its initial year and wants to improve. To reduce the threat of competition taking away vendors and/or patrons, I recommend the following:

- Adopt the SwiftPay system, which may improve the vendor experience (e.g., improved planning through data analytics and less complication of transactions); however, it is important to note that making the use of SwiftPay mandatory could deter some vendors because they may wish to accept cash and/or use their own payment system.
- Address complaints from vendors about fixed-fee calculations by making the allocation of fixed costs more equitable, based on usage of the services.
- Establish a risk management plan (around food safety, etc.), which would help ensure the safety of patrons and help maintain the reputation of the Festival.

To further reduce the risk, FI should stay abreast of what other festivals are doing, and of industry trends. FI should determine whether there are relevant websites, publications or conferences that could assist with this research. As the fees have been a contentious issue in 2019, compare the fees that FI charges vendors to the fees charged at other festivals and events.

FI should survey not only the customers on their experience, but also the vendors, to see where improvements could be made and to keep them returning to the Festival each year.

**Risk 3 –** Contaminated food or other safety risks may cause illness, injury or death of customers.

This is a large festival that serves many types of food and drinks, including alcoholic beverages. There are concerts each day and night. This type of atmosphere can result in people getting hurt. If a serious injury or death were to occur, damage to the Festival's reputation could be significant. The loss would be particularly bad if appropriate safety procedures were not in place.

In order to address this risk, liability insurance is necessary. This is an example of risk transfer. If appropriate insurance is not in place already, you must obtain it for the 2020 Festival. FI should meet with an insurance salesperson who specializes in events such as this.

However, insurance is not sufficient on its own. The fact that health and safety fines were charged to FI in 2019 is concerning and highlights the need to address these risks. Steps should be taken to reduce the possibility of the risk event occurring in the first place.

#### For example:

- FI should have adequate first aid supplies at the Festival. Life-saving items such as fire
  extinguishers, heart defibrillators in case of cardiac arrest, and EpiPens in case of food allergy,
  should be present, and staff should be trained in their use. Emergency services should be
  advised of the Festival dates so that ambulances can be on standby. Perhaps a private
  medical services company could be hired to remain onsite for the duration of the Festival.
- If something, such as a fire, occurs that requires immediate evacuation of the premises, a disaster plan should be in place. FI should ensure that there are sufficient exits for this evacuation, and that they are well marked.

Standard rules should be in place that the vendors are asked to follow, such as, for example,
maximum occupancies in their seating areas, requirements to cover electrical wiring to
prevent trip hazards, rules regarding maintaining cleanliness of the site, rules regarding the
appropriate disposal of garbage and requirements to not overserve alcohol. These rules
should be written into the contracts that FI has with its vendors.

**Risk 4 –** Technical issues with SwiftPay could result in customers not being able to pay for purchases.

Having all the vendors using the same app has advantages that were previously discussed.

However, technical issues that result in patrons being unable to pay for their food and drinks could dampen their experience. Given how quickly word spreads through social media, this could discourage others from attending. If it has not been done already, this risk should be discussed with SwiftPay's support people. If this risk event occurs, you will need to have a backup plan in place.

At a minimum, a plan to operate manually should be developed and provided to vendors, to ensure that cash controls and proper recording of information occurs.

#### **Additional Risks**

#### Losing the current site location

The current site location is on waterfront and is rented each year. Should FI lose its lease with the municipality, this location could be challenging to replicate. FI should determine whether alternative locations are available if it should lose the lease. You should also ask the municipality if the site could be secured for a few years at a time, with enough notice for FI to locate another site in case of non-renewal.

# Working capital / cash flow needs

You have struggled to manage FI's cash flow needs, given the time lag between when the bills are paid and when vendors pay FI their respective fees. If you do not develop a cash flow management system, FI could be unable to pay its bills on time. This is discussed further above, with recommendations that could be implemented to address this risk.

### <u>Weather</u>

Weather-related risks cannot be controlled, but you must have some planning in place in case the Festival turns out to be adversely affected by the weather. You might want to consider having tents available to provide a covered area where customers can eat and drink in the event of rain or extreme heat.

It is important to remember that risk identification and assessment must be ongoing. A risk management program should be considered in the planning and execution of FI, and should be updated throughout, as required.

For Assessment Opportunity #5 (Strategy and Governance), 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 business risks or suggest a risk management approach.

**Competent** – The candidate discusses some of the business risks and suggests a risk management approach.

**Competent with distinction** – The candidate discusses several of the business risks and suggests a risk management approach.

# **Assessment Opportunity #6 (Depth and Breadth Opportunity)**

The candidate discusses the accounting treatment for the costs related to SwiftPay.

The candidate demonstrates competence in Financial Reporting.

# **CPA Map Competencies:**

1.2.2 Evaluates treatment for routine transactions (Core – Level A)

#### Enabling:

- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

Various costs have been incurred during the fiscal year related to SwiftPay. We have been asked how to account for these costs in the financial statements for the fiscal year ending April 30, 2020, keeping in mind that FI will prepare its financial statements in accordance with ASPE. The information presented suggests that there are different types of costs that require different accounting treatment.

## SwiftPay Licence - \$75,000

To determine how to account for this licence, ASPE 3064 needs to be consulted:

- ".18 The recognition of an item as an intangible asset requires an entity to demonstrate that the item meets:
- (a) the definition of an intangible asset (see paragraphs 3064.08-.17); and
- (b) the recognition criteria (see paragraphs 3064.21-.23)."

The licence meets the definition of an intangible asset (identifiability, control and existence of future economic benefits), as supported by the following:

#### Identifiability

The licence is identifiable, as per ASPE 3064.12(b):

- ".12 An asset meets the identifiability criterion in the definition of an intangible asset when it:
- (b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations."

FI has paid to have access to the software and upgrades for a period of three years. This is a legal right to use the software and upgrades.

#### Control

Based on the legal right of use, FI has control, as per ASPE 3064.13:

"An entity controls an asset if the entity has the power to obtain the future economic benefits flowing from the underlying resource and to restrict the access of others to those benefits. The capacity of an entity to control the future economic benefits from an intangible asset would normally stem from legal rights that are enforceable in a court of law."

# Existence of future economic benefits

As well, the asset will result in future economic benefits to FI as the licence will ensure that FI collects variable fees owed to it when sales transactions by vendors occur. In addition, it enables vendors to process debit and credit sales, which they are currently unable to do; this will benefit both FI and the vendors by providing increased potential for sales. As well, as per ASPE 3064.25, in the case of a separately purchased intangible, the price paid reflects expectations about probability that the expected future economic benefits embodied in the asset will flow to the entity.

The recognition criteria, which are stated in ASPE 3064.21, are also met:

- ".21 An intangible asset shall be recognized if, and only if:
- (a) it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and"

This criterion is met, as discussed above.

"(b) the cost of the asset can be measured reliably."

This criterion is also met, as per paragraph 26:

"The cost of a separately acquired intangible asset can usually be measured reliably. This is particularly so when the purchase consideration is in the form of cash or other monetary assets."

Therefore, the \$75,000 licence fee can be capitalized as an intangible asset.

## SwiftPay Testing Costs - \$5,000

\$5,000 was paid for in-person testing, provided by the company that licenses SwiftPay. This testing allowed the application to be tailored to meet FI's needs for the Festival. ASPE 3064 states:

- ".27 The cost of a separately acquired intangible asset comprises:
- (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates; and
- (b) any directly attributable cost of preparing the asset for its intended use.
- .28 Examples of directly attributable costs are:
- (a) costs of salaries, wages and employee benefits arising directly from bringing the asset to its working condition;
- (b) professional fees arising directly from bringing the asset to its working condition; and
- (c) costs of testing whether the asset is functioning properly."

Therefore, based on guidance from paragraph 28(c), the \$5,000 can be capitalized with the licence.

This results in a total of \$80,000 capitalized for the licence. This amount must be amortized, as per ASPE 3064.56:

"A recognized intangible asset shall be amortized over its useful life to an enterprise, unless the life is determined to be indefinite. When an intangible asset is determined to have an indefinite useful life, it shall not be amortized until its life is determined to be no longer indefinite."

Therefore, the \$80,000 should be amortized over the useful life of three years. The licence will be useful throughout that period as the licensing company will provide all upgrades during that time. The year ending April 30, 2020, would require a charge of \$6,667 (\$80,000 × 3/36 months), since SwiftPay was ready for use as of February 1, 2020; because technological obsolescence is a factor, amortization commences when the asset is ready for use.

#### Tablets - \$65,000

The 45 tablets would be capitalized as per ASPE 3061.03, which defines PP&E as:

"Property, plant and equipment are identifiable tangible assets that meet all of the following criteria:

(i) are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other property, plant and equipment;"

This criterion is met because the tablets will be used at the Festival.

"(ii) have been acquired, constructed or developed with the intention of being used on a continuing basis; and"

This criterion is met because FI plans to use the tablets each year at the Festival. The licence for software to operate these tablets is currently in effect for three years.

"(iii) are not intended for sale in the ordinary course of business."

This criterion is met as the tablets are not held for sale.

#### Recommendation

I recommend that FI capitalize the tablets at \$65,000 and amortize them over their useful life, as per the following paragraphs from Section ASPE 3061:

- ".04 Property, plant and equipment shall be recorded at cost.
- ".16 Amortization shall be recognized in a rational and systematic manner appropriate to the nature of an item of property, plant and equipment with a limited life and its use by the enterprise. The amount of amortization that shall be charged to income is the greater of:
- (a) the cost less salvage value over the life of the asset; and
- (b) the cost less residual value over the useful life of the asset."

Management must determine the estimated useful life of the tablets. Given the rapid pace of change in technology and the fact that the tablets will be used by a variety of food truck vendors who may not maintain them well, a relatively short useful life is likely.

For Assessment Opportunity #6 (Financial Reporting), 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 costs related to SwiftPay.

**Competent** – The candidate discusses the accounting treatment for the costs related to SwiftPay.

**Competent with distinction** – The candidate thoroughly discusses the accounting treatment for the costs related to SwiftPay.

# **Assessment Opportunity #7 (Breadth Opportunity)**

The candidate calculates a revised estimate of corporate taxes payable.

The candidate demonstrates competence in Taxation.

### **CPA Map Competencies:**

6.2.2 Advises on taxes payable for a corporation (Core – Level B)

#### Enabling:

2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions

3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

#### **Corporate Taxes Payable Calculation**

Juan, you attempted to estimate the corporate taxes payable for FI's first fiscal year end. I have corrected the calculation and provided support for the adjustments. Instalment payments made to the CRA thus far for 2020, if any, should be compared to this analysis and adjusted as necessary.

		Note
Net income, as previously stated	\$125,000	
Add back costs incorrectly expensed:		
Licence fee for SwiftPay	75,000	1
Testing costs for SwiftPay	5,000	1
Tablets	65,000	2
Revised net income:	270,000	
Schedule 1 adjustments:		
Depreciation on furniture and fixtures	5,000	3
Capital cost allowance	(70,979)	4
Meals and entertainment	2,000	5
Fines	4,000	6
Taxable income	210,021	
Federal tax rate	9%	7
Estimated tax payable	\$ 18,902	

#### Notes:

1. Paragraph 18(1)(b) of the Income Tax Act prohibits deduction of expenditures designated as capital.

However, paragraph 20(1)(a) permits the deduction of capital cost allowance (CCA) with respect to capital expenditures.

Class 14 is the CCA class for limited-life intangible assets. Class 14 uses straight line over legal life on a pro-rated, per diem basis. The accelerated investment incentive (AII) applies to this class to increase the first-year deduction to 150% of the usual deduction.

Therefore, CCA will be  $\$80,000 \times (90/1,096 \text{ days}) \times 150\% = \$9,854$ .

2. As discussed above, capital expenditures are not deductible.

CCA on the tablets would be deductible. Class 50 is the appropriate class, which is calculated using a 55% declining balance rate. The half-year rule is normally applicable, but again the All allows for 150% of the cost to be included in the calculation for the first year only.

$$CCA = $65,000 \times 150\% \times 55\% = $53,625.$$

3. The depreciation that was calculated for these assets is not tax deductible. Therefore, any depreciation expensed in the calculation of accounting net income would be added back in the calculation of taxable income.

5. Paragraph 67.1(1) limits deductions on meals and entertainment expenses to 50% of the incurred cost. This general limitation has an exception for up to six events per year where the amounts paid are related to a special event provided to all employees. This exception is found in paragraph 67.1(2)(f) and allows 100% of the cost of the event to be deducted.

Therefore, the add-back required is:

- 6. Section 67.6 disallows deduction for any fines or penalties.
- 7. As its taxable income is below the annual business limit of \$500,000, FI would pay the small business rate of tax. The federal rate is 9%. Provincial taxes will also apply, which range from 0% to 6%, depending on the province.

#### Additional note

Excess inventory purchased that remains on hand at year end is not deductible until it is used. As the amount is unknown, no adjustment has been made.

For Assessment Opportunity #7 (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 revise the estimate of corporate taxes payable for the April 30, 2020, year end.

**Competent** – The candidate revises the estimate of corporate taxes payable for the April 30, 2020, year end.

**Competent with distinction** – The candidate thoroughly revises the estimate of corporate taxes payable for the April 30, 2020, year end.

<u>Case #3</u> (Suggested time: 70 minutes)

Dreamy Donuts Co. (DD), is a private corporation that was formed two years ago by Danielle Cook, the sole shareholder. DD has a December 31 year end. DD offers specialty, vegan and gluten-free donuts and strives to provide customers with a unique experience.

DD operates a "pop-up" business at festivals, farmers markets and at other events that its target customers attend. Danielle only uses the freshest ingredients and promotes locally sourced goods, to support the local economy. The donuts are fried in front of the customer and then dipped in various unique, seasonal toppings. Given the donuts' higher-quality ingredients and superior freshness, DD's sales prices are higher than at other donut shops.

DD has recently received some orders to cater weddings, and Danielle would like to cater large events more often. She currently operates DD by herself and has never hired employees.

It is January 2020 and you, CPA, work for Birks LLP, a public accounting firm. Danielle has come to you for advice. Her goal is to grow DD's customer base while maintaining its objective of providing high-quality, locally produced, vegan and gluten-free donuts and a unique experience for its customers.

Danielle starts: "I think DD is doing well (Appendix I), but similar companies always look like they are doing better. I found some industry benchmarks for small- to mid-sized bakeries (Appendix II). Could you discuss how DD is performing relative to these ratios?

"Some of my customers have said it would be more convenient to be able to buy DD's donuts from the same location every day. I may have found the ideal location (Appendix III). It is located downtown, close to where all the outdoor summer events are held, and would provide a permanent location while still allowing DD to operate as a pop-up.

"However, I received a call yesterday from the president of Gogo Foods Inc. (Gogo), which has me thinking there may be another way to grow. They offered DD a permanent booth inside the local Gogo store (Appendix IV).

"How do you see each option fitting with DD's goals and general direction? Maybe I should just keep doing what I'm doing now. Can you also help me by preparing a quantitative analysis of my options?

"Finally, it has been such a busy year for me that I have not had time to think about personal tax. Can you tell me how much my federal personal income taxes will be for 2019 (Appendix V)?"

# APPENDIX I INTERNAL FINANCIAL STATEMENTS

Dreamy Donuts Co.
Income Statement
For the year ended December 31, 2019

	Note		
Revenue		\$ 180,000	)
Cost of goods sold		(40,000	))
Gross margin		140,000	)
			_
Expenses			
Amortization	1	4,500	)
Insurance		1,000	)
Interest		100	)
Rent	2	48,000	)
Transportation	3	7,700	)
Wages	4	50,000	)
		111,300	)
			-
Net income		\$ 28,700	)

# APPENDIX I (continued) INTERNAL FINANCIAL STATEMENTS

# Dreamy Donuts Co. Balance Sheet As at December 31, 2019

	Note		
Cash		\$	3,575
Accounts receivable	5		2,275
Inventory	6		1,500
Property, plant and equipment	1		11,000
Total assets		\$	18,350
Accounts payable	7	\$	5,500
Long-term debt			3,000
Total liabilities			8,500
Common shares			500
Retained earnings			9,350
Total shareholder's equity			9,850
		-	•
Total liabilities and shareholder's equity		\$	18,350

# APPENDIX I (continued) INTERNAL FINANCIAL STATEMENTS

#### Danielle's Notes:

- 1. Amortization is for a deep fryer, a booth and a minivan that I use to transport the equipment and batter to the pop-up locations.
- 2. I rent a commercial kitchen for \$4,000 per month.
- 3. Transportation includes the costs incurred to operate the pop-ups.
- 4. Wages are my salary for the year, including \$2,426 for Canada Pension Plan paid by DD. An equal amount was withheld from my pay for the employee portion. Federal income taxes withheld from my pay were \$3,600.
- 5. Accounts receivable includes the amount owed to DD by the credit card company. It also includes amounts owed by catering clients who have yet to make the agreed-upon payments.
- 6. Inventory includes baking supplies and containers for packaging.
- 7. Accounts payable includes amounts owed to suppliers and the current portion of the long-term debt, which was borrowed to start the business.

# APPENDIX II INDUSTRY BENCHMARKS

Current ratio	1.2
Inventory turnover (times per year)	18
Gross margin	86%
Debt ratio (total liabilities divided by total assets)	84%

# APPENDIX III INFORMATION ON PERMANENT LOCATION

Currently, DD rents a commercial kitchen to prepare the donut batter, which is then transported to the pop-up locations and fried as needed, in order to ensure freshness. The smell of freshly cooked dough attracts customers.

The proposed permanent location would contain DD's own commercial kitchen as well as a retail outlet. The building already has a kitchen and is surrounded by like-minded retailers, such as local artists and a boutique that sells ethically-produced clothing.

DD's annual revenue from the permanent location should be \$250,000. Because I want to keep the pop-up operation, I will have to hire staff to operate the permanent location, at an annual cost of \$85,000. Opening a permanent location will cannibalize some of the pop-up sales but I still expect annual pop-up revenue of \$130,000.

To use the building, DD must sign a five-year lease with a monthly rent of \$5,000. Operating costs for the building are approximately \$37,000 annually. Signing the lease makes me nervous, which is why I like a pop-up operation!

In the future, I may consider buying the building. If so, I will need a loan. This will likely require audited financial statements. Please tell me what procedures would be performed by the auditors on DD's 2019 balance sheet and why, so that I know what to expect.

# APPENDIX IV GOGO'S OFFER

The local Gogo store is located outside the downtown core, in a large commercial area. Gogo is a big grocery store chain that targets customers who choose price over quality.

DD would pay Gogo a monthly fixed fee of \$5,000, plus 5% of gross revenue. The booth, designed by Gogo, would operate within Gogo's hours of operation. So that all customers wishing to purchase DD's donuts must visit the Gogo location, DD must discontinue operating as a pop-up. I would be able to operate the booth on my own without the need for additional employees. DD will also have to offer non-vegan, non-gluten-free donuts and Gogo will approve the ingredient lists for all recipes.

To appeal more to its customers, Gogo wants DD to reduce the selling price. At the reduced prices, Gogo's president estimates DD's annual revenue should be \$400,000. Gogo's president suggested that, if the target level of sales is met by the end of the year-long agreement, Gogo might install a booth in each of its locations across Canada.

Speed of service is essential. Since weekends are extremely busy, DD will be required to estimate the day's sales and deep fry everything ahead of time in order to achieve the sales target. Gogo will allow DD to use its kitchen facilities and fryer.

I estimate that my gross margin will be reduced to 60%.

# APPENDIX V INFORMATION FOR 2019 PERSONAL TAXES

- In addition to my income from DD, I received a \$5,000 eligible dividend and \$6,000 in interest income. I paid a \$500 fee for investment broker advice.
- My husband earned \$10,000 in employment income in 2019.
- I have a \$1,000 receipt for childcare in 2019.
- I have a \$1,500 donation slip from a local registered charity.
- I contributed \$500 per month to my RRSP throughout 2019 but, beginning in January 2020, I increased it to \$600 per month. According to my 2018 notice of assessment, I had \$10,000 of RRSP deduction room available for 2019. In the past, I have always deducted the maximum RRSP amount on my tax returns.

### MARKING GUIDE 3-3 DREAMY DONUTS CO. (DD) ASSESSMENT OPPORTUNITIES

To: Danielle Cook

From: CPA

Subject: Advice regarding Dreamy Donuts Co. (DD)

#### **Assessment Opportunity #1 (Breadth Opportunity)**

The candidate calculates financial ratios and assesses how DD is performing relative to the industry.

The candidate demonstrates competence in Finance.

#### **CPA Map Competencies:**

5.1.1 Evaluates the entity's financial state (Core – Level A)

#### Enabling:

- 2.1.3.4 Chooses and applies appropriate analysis techniques
- 2.1.3.5 Explains how trends, relationships, or other patterns affect conclusions or lead to the need for further analysis

I have calculated several financial ratios, based on DD's financial information over the past year and on industry information provided.

#### **Current Ratio**

Industry Benchmark	Formula	Calculation	DD's Ratio	Difference
1.2	Current assets / Current liabilities	= (\$3,575 + \$2,275 + \$1,500)/\$5,500	1.34	0.14

The current ratio indicates how quickly a company can liquidate its assets. If the ratio is less than one, the company does not have enough liquid assets to cover its short-term liabilities.

DD's current ratio is greater than one, which means that DD has enough liquid assets to cover its current liabilities. The industry benchmark is close to one, which means that, on average, other bakeries carry just enough liquid assets to cover their short-term liabilities. In comparison, DD seems to have more liquid assets than other bakeries. Given the potential upcoming projects, the ability to cover your short-term liabilities will be beneficial if additional expenses arise. However, you should not have an excessive amount of idle cash on hand, as it could be used to help reduce costs, such as interest expense. I recommend that you ask the bank if you can use some of the excess cash to make an extra payment on the long-term debt, to reduce the principal amount borrowed and therefore reduce the amount of interest paid.

#### **Inventory Turnover**

Industry Benchmark	Formula	Calculation	DD's Ratio	Difference
18	Cost of goods sold / Average inventory	= \$40,000/\$1,500	27	9

The inventory turnover ratio indicates how many times a company has sold its inventory throughout the year.

Since we do not have the average inventory, we used the inventory value as of December 31, 2019. DD's inventory turnover indicates that DD converts its inventory to sales, on average, 27 times during the year, or every 14 days (365 days /27). Other bakeries appear to have a much slower inventory turnover, with their inventory turning over 18 times on average during the year, or every 20 days (365 days /18). DD's inventory turnover is high compared to the benchmark, which, given DD's commitment to freshness, makes sense. Therefore, when DD purchases the supplies used in its recipes, those supplies are quickly converted and sold as its final product. Other companies, especially those that emphasize price over quality, presumably turn their inventory over more slowly because fresh ingredients are less essential to the business model. This ratio indicates that DD has been successful in its commitment to freshness.

#### **Gross Margin**

Industry Benchmark	Formula	Calculation	DD's Ratio	Difference
86%	(Sales - Cost of goods sold)/Sales	= (\$180,000 - \$40,000)/\$180,000	78%	8%

The gross margin percentage reflects the percentage of profit received for each sales dollar after considering the cost of goods sold.

For every sales dollar earned by DD, it receives 78% in gross profit. In comparison to other bakeries, DD earns 8% less gross profit per sales dollar. This is likely because DD uses higher quality, more expensive ingredients than other bakeries. As a smaller operation, DD likely does not purchase raw material, such as flour and sugar, in bulk, therefore not realizing cost savings similar to larger bakeries in the industry. As it is your goal to grow DD's customer base, you will correspondingly have to increase the amount of raw materials purchased, which might increase your savings if you receive volume discounts.

#### **Debt Ratio**

Industry Benchmark	Formula	Calculation	DD's Ratio	Difference
84%	Total liabilities / Total assets	= \$8,500/\$18,350	46%	38%

The debt-to-asset ratio measures the percentage of assets that are financed by debt.

46% of DD's assets are currently financed by debt. In comparison to other bakeries, this ratio appears very low, and is likely because DD is operating as a pop-up and currently does not finance a significant number of assets through debt.

#### Conclusion

Overall, DD appears to be in a healthy financial state in comparison to the industry benchmarks. DD seems to be performing better in certain aspects, due to operating as a pop-up with a single employee/owner versus operating in a permanent location with several employees and/or owners.

For Assessment Opportunity #1 (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 some of the financial ratios and assess how DD is performing relative to the industry.

**Competent** – The candidate calculates some of the financial ratios and assesses how DD is performing relative to the industry.

**Competent with distinction** – The candidate calculates most of the financial ratios and assesses how DD is performing relative to the industry.

### **Assessment Opportunity #2 (Depth and Breadth Opportunity)**

The candidate prepares a quantitative analysis of the growth options.

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)

#### Enabling:

- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered
- 2.1.3.4 Chooses and applies appropriate analysis techniques
- 2.1.4.7 Explicitly articulates and justifies assumptions

#### **Growth Options – Quantitative Evaluation**

I have calculated the incremental income that would be available with the permanent physical location and with Gogo's offer.

#### **Permanent Location Option**

		Note
Revenue – store	\$ 250,000	1
Revenue – pop-up	(50,000)	2
Cost of goods sold	(44,444)	3
Rent decrease	48,000	4
Building lease	(60,000)	5
Building operating costs	(37,000)	6
Staffing costs	(85,000)	7
Cost of audit	?	8
	_	
Incremental income	\$ 21,556	

#### Notes:

- 1. You expect the store revenue to be \$250,000 annually.
- 2. In 2019, DD's pop-up revenue was \$180,000 and Danielle expects this to decrease to \$130,000 if a permanent location is opened, for a net decrease of \$50,000.
- 3. The cost of goods sold would increase in proportion to the increase in revenue  $[(\$250,000 \$50,000) \times (\$40,000/\$180,000)]$ .
- 4. As the permanent location will have its own kitchen, DD is no longer required to rent the kitchen, at \$4,000 per month.
- 5. The rental expense on the new building lease is \$5,000 per month.

- 6. Building operating costs are estimated at \$37,000 annually.
- 7. Staffing costs to operate the store are estimated at \$85,000 annually.
- 8. The cost of providing audited financial statements to the bank is currently unknown but is a cost that will reduce the potential profit of this option.

#### **Gogo Option**

		Note
Revenue – booth	\$ 400,000	1
Cost of goods sold – booth	(160,000)	2
Lost gross margin – pop-up	(140,000)	3
Fixed fee to Gogo	(60,000)	4
Variable fee to Gogo	(20,000)	5
Rent decrease	48,000	6
Transportation savings	7,700	7
Incremental income	\$ 75,700	

#### Notes:

- 1. Gogo's president estimates that the annual booth revenue will be \$400,000.
- 2. You estimate the gross margin to be 60%, so the cost of goods sold will be \$160,000  $($400,000 \times 40\%)$ .
- 3. DD must discontinue operating the pop-up location and will therefore lose the gross margin from the pop-up location.
- 4. The fixed fee paid to Gogo is \$5,000 per month.
- 5. The variable fee paid to Gogo is 5% of gross revenue ( $$400,000 \times 5\%$ ).
- 6. As Gogo's kitchen can be used, DD is no longer required to rent the kitchen.
- 7. As the donuts will be baked and sold on site, DD is no longer incurring a transportation expense.

Also, since Gogo will provide all the necessary equipment to operate the new location, it may be possible to sell the equipment that DD currently owns (deep fryer, booth and minivan), although the amount earned may not be material. This will result in additional savings for expenses directly related to those assets.

#### Conclusion

Selecting either one of the options will increase DD's profits in comparison to the status quo. Selecting Gogo's offer will result in higher net income in comparison to leasing the permanent location. However, this does not consider the qualitative decision factors.

For Assessment Opportunity #2 (Management Accounting), 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 prepare a quantitative analysis of the growth options.

**Competent** – The candidate prepares a quantitative analysis of the growth options.

**Competent with distinction** – The candidate prepares a thorough quantitative analysis of the growth options.

#### **Assessment Opportunity #3 (Breadth Opportunity)**

The candidate discusses the strategic decision factors and recommends one of the growth options.

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)
- 2.3.3 Evaluates strategic alternatives (Core Level B)

#### Enabling:

- 2.1.4.1 Explores potentially viable solutions or conclusions
- 2.1.4.5 Integrates information and the results of quantitative and qualitative analyses to evaluate alternative solutions/conclusions
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions

There are two new opportunities available to you:

- 1. accept Gogo's offer to operate a permanent booth at its local store; or
- 2. establish a permanent physical location.

Both options will have a significant impact on DD's strategic direction.

You also have the option of continuing to operate DD solely as a pop-up. If you decide to maintain the status quo and operate solely as a pop-up, DD's customer base can continue to be expanded but the size of the business is dependant upon the number of pop-ups you can host. Hiring help will likely be necessary.

If you are interested in increasing DD's customer base, maintaining the status quo is likely not the most feasible option for the longer term; if you want to cater large events more often, which you indicated as a desire, you need to consider a more permanent setup.

I have evaluated the positive and negative qualitative factors of each of the two opportunities.

Goals/Values	Permanent Location	Gogo's Offer
Provide your	Pro:	Con:
customers with a	As you will have control	DD will have to adopt Gogo's appearance,
unique experience	over the location and its	atmosphere, pricing and hours of operation.
	appearance, atmosphere	You will lose a lot of control over your
	and hours of operation, you	business and might not be able to provide
	will be able to design the	customers with the same unique
	interior in a way that meets	experience. Also, customers may be
	your goal of enhancing the	confused by the change in donut
	customer's eating	preparation between the weekdays and the
	experience by making it a	weekend (fresh versus pre-prepared). This
	unique location.	could hurt DD's reputation and is not
		aligned with its values. You will also have to
		offer different types of donuts than you
		normally offer, which might alter the
		uniqueness of the experience for
		customers.

Goals/Values	Permanent Location	Gogo's Offer
Provide your	Pro:	Con:
customers with	As you will maintain control	Adopting Gogo's brand means providing
donuts made from	over the ingredients and	donuts for the lowest prices possible. This is
high quality, fresh	recipes of your donuts, you	not part of DD's values; DD wants to
ingredients	will be able to continue to	provide high-quality donuts to its customers
	offer your customers high-	and charges higher prices that reflect that
	quality donuts. In addition,	quality. This decrease in pricing might lead
	the donuts will be fried	to a necessary cut in the costs of the
	fresh, using ingredients	ingredients, and therefore a decrease in the
	chosen by you, as the	quality of the donuts. In addition, on the
	customers order them.	weekends, the donuts will have been fried
		earlier that morning, which will reduce their
		freshness.
		Gogo must approve all ingredient lists.
		There is a risk that Gogo will force DD to
		use
		lower-quality ingredients, perhaps from
		Gogo's store, instead of locally sourced,
		high quality, fresh ingredients.
Supporting the local	Pro:	Con:
economy and	The store location is close	Gogo's location is further away from the
locally-sourced	to where outdoor summer	other locally owned and operated
goods	events are held, and is near	businesses and events, which means it is
	retailers that compliment	further away from DD's target customers.
	DD's values (e.g., local	Gogo is also a large chain; therefore, the
	artists and an ethically-	profits are likely not reinvested in the local
	produced clothing store).	community but rather sent to the home office location. This does not support DD's
	The permanent location	values.
	would help support the local	
	economy by keeping	
	businesses in the	
	downtown area. Customers	
	who come to purchase	
	donuts may also shop at	
	the adjacent, locally-owned	
	retailers and/or attend a	
	local event.	

Goals/Values	Permanent Location	Gogo's Offer
Grow DD's customer	Pro:	Pro:
base	You can satisfy your	If the required revenue levels are met, DD
	current, regular customers	can possibly expand through Gogo after the
	by complying with their	first year. As it already has several locations
	request for a permanent	across Canada, expanding through Gogo
	location for DD. You can	will be less risky and easier. It is uncertain
	also continue to grow DD's	whether DD may have to hire any staff itself.
	customer base by	Offering a greater range of donuts
	continuing to run pop-up	(non-gluten free and non-vegan) will allow
	operations while meeting	DD to expand its customer base.
	regular customer needs.	
	You will also have the	Con:
	freedom to pursue catering	As you cannot operate as a pop-up and it is
	opportunities.	uncertain whether you will be allowed to
		operate a catering service, DD will not be
	<u>Con:</u>	able to expand its current customer base in
	DD will need to hire	the next year and could potentially lose
	additional staff; managing	some of its current customer base as the
	staff is time-consuming and	,
	expensive.	target customers. It is unclear if DD will be
		able to meet the revenue requirements set
		out by Gogo in order for expansion to occur.
		Also, Gogo's customer base does not seem
		similar to the customer base that DD wants
		to target.

Based on the above assessment, even though it produces lower incremental income relative to the Gogo option, I recommend that you pursue the permanent location option as it appears to be better aligned with your goals and values.

For Assessment Opportunity #3 (Strategy and Governance), 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 some strategic decision factors while considering the fit of each option with Danielle's goals and values.

**Competent** – The candidate discusses some strategic decision factors while considering the fit of each option with Danielle's goals and values, and provides a recommendation.

**Competent with distinction** – The candidate discusses several strategic decision factors while considering the fit of each option with Danielle's goals and values, and provides a recommendation.

#### **Assessment Opportunity #4 (Breadth Opportunity)**

The candidate calculates the 2019 personal federal income taxes payable.

The candidate demonstrates competence in Taxation.

#### **CPA Map Competencies:**

6.3.2 Evaluates income taxes payable for an individual (Core – Level B)

#### Enabling:

- 2.1.2.2 Uses appropriate methods to gather or develop relevant information
- 2.1.5.1 Develops appropriate decision criteria and uses the criteria to select and justify a preferred solution/conclusion or to rank potential solutions
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

### **Estimated Personal Income Taxes Payable**

Based on the information provided, I have estimated your personal federal income taxes payable for 2019 to be \$544.

Employment income (\$50,000 - \$2,426)		\$47,574	
Property income			
Dividend income	5,000		
Gross up at 38%	1,900		
Taxable dividend	6,900		
Interest income	6,000		
Broker fee	(500)	12,400	
Other deductions			
RRSP ( $$500 \times 10 + $600 \times 2$ )		(6,200)	
Net income for tax purposes and taxable income		53,774	
Federal tax on taxable income			
\$0 - \$47,630		15%	7,145
\$47,630 - \$95,259	_	20.5%	1,260
Federal tax			8,405
Personal tax credits – Note 1		_	(4,261)
Basic federal taxes payable			4,144
			()
Taxes withheld		_	(3,600)
Balance payable		=	\$ 544

#### Note 1:

Basic personal amount		\$12,069
Spousal amount [\$12,069 - (\$10,000 income - \$1,000		
childcare)]		3,069
CPP		2,426
Employment amount		1,222
		18,786
15% (Tax credit rate)		2,818
Donation	1,500	
15% of \$200		30
29% of the difference (\$1,500 - \$200)		377
Donation credit		407
Federal dividend tax credit		
Gross-up	1,900	
	× 6/11	1,036
Total a sussa al tass and diffe		Ф. 4.004
Total personal tax credits		\$ 4,261

The deadline for you to file your personal income tax return is April 30, 2020.

As you mentioned that you always deduct the maximum RRSP contributions each year, I will assume that you have already deducted the January and February 2019 contributions on your 2018 tax return. The January and February 2020 contributions of \$600 each are deductible against your 2019 income. The total contributions of \$6,200 are less than your deduction limit per your 2018 notice of assessment, so are all deductible.

I could not deduct the childcare costs on your tax return, since they must be deducted on the tax return of the lower-income spouse (in this case, your husband). He can deduct the least of: a) the actual costs (\$1,000); b) the 2019 dollar amount; and c) 2/3 of his earned income of \$10,000 = \$6,667. I do not know how many children you have or their ages, but the minimum dollar amount per child is \$5,000 for children between the ages of seven and 16, so the dollar limit (b) would be at least \$5,000. As the least of those three is \$1,000, that amount is showing as a reduction to his income in the calculation of the spousal amount.

For the donation, since your income is not in the highest tax bracket, you are not eligible for the 33% tax credit rate.

For Assessment Opportunity #4 (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 personal federal taxes payable.

**Competent** – The candidate calculates the personal federal taxes payable.

**Competent with distinction** – The candidate thoroughly calculates the personal federal taxes payable.

#### **Assessment Opportunity #5 (Breadth Opportunity)**

The candidate provides audit procedures that would be performed on DD's 2019 balance sheet.

The candidate demonstrates competence in Audit and Assurance.

#### **CPA Map Competencies:**

4.3.6 Develops appropriate procedures, including Audit Data Analytics (ADA), based on the identified risk of material misstatement (Core – Level B)

#### Enabling:

- 2.1.1.3 Exercises judgement in determining whether an issue requires attention
- 2.1.2.1 Identifies the purpose and type(s) of information to be gathered
- 3.3.2 Adapts terminology, information content, and degree of detail for intended user(s)

#### **Audit Procedures**

If you decide to buy the building and get a loan, audited financial statements will likely be required. Because DD's financial statements have not been audited before, the auditor will have to perform testing on the opening balances (i.e., the prior year balances) in addition to the current year balances, to ensure that there are no material misstatements in the opening balances that could affect the current-year financial statements. The auditor will request a copy of DD's general ledger and trial balance, which can likely be exported from DD's accounting software. Additional source documentation will also be requested.

You specifically asked about the procedures that will likely be performed over the balance sheet accounts. The auditor will mainly want to ensure that any material assets are not overstated, and that the liabilities are not understated. The procedures are likely as follows.

#### Account: Cash

Assertion: Existence, completeness and accuracy

#### Procedures:

- The auditor would request a confirmation from the bank that shows the cash balance as at December 31, in DD's bank account.
- The auditor will review the bank reconciliation to vouch outstanding cheques and deposits.

#### Account: Accounts receivable

Assertion: Existence and accuracy/valuation

#### Procedures:

- For catering accounts receivable, the auditor would typically request DD's accounts receivable
  listing, select a sample of accounts and send confirmations to the individuals who asked DD
  to cater donuts at their wedding, to verify the amount and collectability. The auditor may also
  select a sample of accounts and vouch the subsequent receipt of cash, to verify collectability.
- For credit card accounts receivable, the auditor will trace a sample of items that are included
  in the accounts receivable at year end, and trace them to the credit card summaries provided
  by the credit card companies who collect funds on DD's behalf when a customer purchases a
  donut using their credit cards, to verify that the amount is correct. The auditor may also send
  a confirmation to the credit card company to verify that the amount is correct and is collectible.
- The auditor would review the aged accounts receivable listing and discuss with management any old accounts receivable (e.g., greater than 60 days), and determine if there is an adequate allowance for any potential uncollectible accounts.

#### Account: Inventory

Assertion: Existence and accuracy/valuation

#### Procedures:

- Since it is past year end, the auditor did not observe the physical inventory count. Therefore,
  a count will need to be performed as soon as possible, and the auditor will need to observe it.
  Rollback procedures will have to be done in order to reconcile the items counted to the
  amounts in inventory at year end. Purchases since year end will have to be vouched to
  invoices from suppliers, and a reasonability analysis using the amount of the sales will have
  to be done on the usage of the inventory since year end.
- The accuracy of the value of the inventory items at the fiscal year end will be audited by vouching to supplier invoices before the year-end date, to verify the cost.

#### Account: Property (commercial van, booth and deep fryer)

Assertion: Existence, completeness and accuracy/valuation

#### Procedures:

- The auditor would typically request DD's capital asset listing and vouch the costs of the assets recorded to source documentation, such as bills of sale and receipts, to confirm the amount and ensure that the purchase was capital in nature.
- The auditor will want to see the commercial van, booth and deep fryer as proof of their existence.
- The auditor will want to see the registration of the commercial van, to ensure that it is under DD's name, as proof of ownership.
- The auditor will want to discuss with you the useful lives used to amortize the assets and will likely compare them to similar assets on the market, to ensure that they are reasonable.

#### Account: Accounts payable

Assertion: Completeness and accuracy

#### Procedures:

- The auditor will perform a search for unrecorded liabilities. This typically involves taking a sample of cash disbursements that happened after year end and vouching to supplier invoices / shipping documents, to determine if they related to an expense that occurred prior to year end. The auditor will also look for unrecorded invoices and determine if the expense from the invoice is related to an expense that occurred prior to year end, and if so, if it has been properly accrued.
- The auditor will review when the last pay period was for salary expenses and will review payroll
  documentation, to determine whether any amounts need to be accrued in relation to this
  expense up to year end.
- The auditor may also require legal letters from your lawyers, to verify if there is any litigation pending or in progress.
- The auditor will also request the loan documentation, to verify if the current portion of the loan has been correctly calculated.

#### Account: Long-term debt

Assertion: Completeness, accuracy and presentation

#### Procedures:

- The auditor will want to see the loan documentation, to determine if the amount has been correctly recorded, and if it has been correctly classified as long-term debt (payable in more than one year).
- If the bank has stated any loan covenants, the auditor will calculate them to determine whether DD complies.

• The auditor will verify the balance of the loan on the bank confirmation, to see if there are any late payments and to verify the outstanding balance.

Be aware that the auditor will also perform audit procedures on the income statement, to ensure that there are no material misstatements that could affect the balance sheet.

For Assessment Opportunity #5 (Audit and 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 identifies some audit procedures that would be performed by the auditors on DD's 2019 balance sheet.

**Competent** – The candidate provides some audit procedures that would be performed by the auditors on DD's 2019 balance sheet.

**Competent with distinction** – The candidate provides several audit procedures that would be performed by the auditors on DD's 2019 balance sheet.

### APPENDIX E

RESULTS BY ASSESSMENT OPPORTUNITIES FOR DAY 2 AND DAY 3

# THE LEVEL 2 DEPTH TEST (DAY 2 and DAY 3)

### **Financial Reporting:**

		NA	NC	RC	С	CD	C+CD
Day 2 Cor	nmon						
AO3	Impairment licences	1%	24%	34%	40%	1%	41%
AO4	Investment in Ruby	2%	31%	34%	31%	2%	33%
AO5	Lease	2%	14%	23%	60%	1%	61%
A06	Convertible debt	9%	36%	13%	39%	3%	42%
Day 3 – Q	1 Jump						
AO1	Cash basis vs. ASPE	0%	7%	33%	53%	7%	60%
Day 3 – Q2 Festival					•	•	
AO6	SwiftPay accounting treatment	2%	15%	27%	47%	9%	56%

# **Management Accounting:**

		NA	NC	RC	С	CD	C+CD
Day 2 C	ommon						
AO1	Bid price (Quant)	2%	19%	36%	38%	5%	43%
AO2	Bid price (Qual)	3%	15%	26%	54%	2%	57%
Day 3 – Q1 Jump							
AO3	Variance analysis	4%	16%	22%	45%	13%	58%
Day 3 -	Q2 Festival						
A01	Recoverable cost allocation	1%	7%	13%	64%	15%	79%
AO2	Percentage of gross sales fee	3%	11%	42%	38%	6%	44%
Day 3 – Q3 Donuts							
AO2	Growth options (Quant)	4%	16%	44%	25%	11%	36%

# THE LEVEL 3 DEPTH TEST ROLES (DAY 2)

Audit a	and Assurance	Papers	NA	NC	RC	С	CD	C+CD
	Acctg for stock							
A07	compensation plans	6245	6%	39%	19%	31%	5%	36%
AO8	Audit plan critique	6245	0%	12%	27%	55%	6%	61%
	Procedures (for the							
AO9	accounting issues)	6245	3%	25%	22%	43%	7%	50%
AO10	Procedures (A/R and PPE)	6245	2%	27%	25%	44%	2%	46%
	Internal control							
	weaknesses (Ruby							
AO11	royalty)	6245	1%	14%	29%	53%	3%	56%
	Procedures (airport							
AO12	contract)	6245	1%	12%	23%	60%	4%	64%
AO13	Reliance on QC's work	6245	2%	30%	21%	43%	4%	47%

Finance	e	Papers	NA	NC	RC	С	CD	C+CD
A07	Cash Budget	548	2%	16%	37%	39%	6%	45%
AO8	Required rate of return							
	(WACC)	548	1%	5%	46%	44%	4%	48%
AO9	Ride sharing NPV (Quant)	548	3%	10%	24%	58%	5%	63%
AO10	Ride sharing (qual)	548	3%	22%	34%	38%	3%	41%
AO11	Financing program risks	548	6%	13%	38%	40%	3%	43%
AO12	Class B conversion value							
	(quant)	548	11%	22%	38%	26%	3%	29%
AO13	Investment options	548	8%	23%	43%	24%	2%	26%

# THE LEVEL 3 DEPTH TEST ROLES (DAY 2)

Perfor	mance Management	Papers	NA	NC	RC	С	CD	C+CD
	Indifference point two							
A07	models (quant)	1458	7%	40%	32%	20%	1%	21%
	Compare business models							
AO8	(qual)	1458	7%	23%	28%	41%	1%	42%
AO9	ECI's strategy fit with Policy	1458	2%	6%	19%	70%	3%	73%
AO10	EEEV's proposal	1458	2%	12%	39%	46%	1%	47%
AO11	Maintenance options	1458	3%	12%	33%	52%	0%	52%
AO12	Drivers' compensation	1458	2%	11%	36%	49%	2%	51%
AO13	High Speed link strategy fit	1458	4%	12%	36%	48%	0%	48%

Taxati	Taxation		NA	NC	RC	С	CD	C+CD
A07	Acquisition of control/losses	356	1%	17%	27%	47%	8%	55%
AO8	Taxable income Ruby (quant)		1%	3%	29%	58%	9%	67%
AO9	Taxes payable Ruby (quant)	356	7%	31%	23%	32%	7%	39%
AO10	Shareholder compensation	356	2%	9%	42%	44%	3%	47%
AO11	Drivers become employees	356	0%	20%	32%	44%	4%	48%
AO12	Employee benefits	356	2%	17%	33%	41%	7%	48%
AO13	QSBC	356	6%	37%	22%	30%	5%	35%

# THE LEVEL 4 BREADTH TEST (DAY 2 AND DAY 3, BY COMPETENCY AREA)

Financia	al Reporting:	NA	NC	RC	С	CD	RC+C+CD			
Day 2 Co	ommon									
AO3	Impairment licences	1%	24%	34%	40%	1%	75%			
AO4	Investment in Ruby	2%	31%	34%	31%	2%	67%			
AO5	Lease	2%	14%	23%	60%	1%	84%			
A06	Convertible debt	9%	36%	13%	39%	3%	55%			
Day 3 -	Q1 Jump									
A01	Cash basis vs. ASPE	0%	7%	33%	53%	7%	93%			
Day 3 -	Day 3 – Q2 Festival									
AO6	SwiftPay accounting treatment	2%	15%	27%	47%	9%	83%			

Manager	nent Accounting:	NA	NC	RC	С	CD	RC+C+CD			
Day 2 Co	ommon									
AO1	Bid price (Quant)	2%	19%	36%	38%	5%	79%			
AO2	Bid price (Qual)	3%	15%	26%	54%	2%	82%			
Day 3 – Q1 Jump										
AO3	Variance analysis	4%	16%	22%	45%	13%	80%			
Day 3 – 0	Q2 Festival									
A01	Recoverable cost allocation	1%	7%	13%	64%	15%	92%			
AO2	Percentage of gross sales fee	3%	11%	42%	38%	6%	86%			
Day 3 – 0	Q3 Donuts									
AO2	Growth options (Quant)	4%	16%	44%	25%	11%	80%			

# THE LEVEL 4 BREADTH TEST (DAY 2 AND DAY 3, BY COMPETENCY AREA)

Strategy and Governance	NA	NC	RC	С	CD	RC+C+CD
III-1 AO5 Franchise agreement risks	3%	6%	26%	45%	20%	91%
III-2 AO5 Business risks management	8%	16%	41%	30%	5%	76%
III-3 AO3 Growth options (Qual)	3%	10%	24%	45%	18%	87%

Audit and	Assurance	NA	NC	RC	С	CD	RC+C+CD
III-1 AO6	Control weaknesses	3%	3%	17%	52%	25%	94%
	Compilation vs review and						
III-2 AO4	independence	1%	7%	49%	38%	5%	92%
III-3 AO5	Audit procedures	10%	21%	23%	36%	10%	69%

Finance		NA	NC	RC	С	CD	RC+C+CD
III-1 AO4	Cash Flow forecast franchise	3%	24%	30%	34%	9%	73%
III-2 AO3	Cash flow management	4%	23%	37%	32%	4%	73%
III-3 AO1	Ratio analysis	1%	7%	38%	47%	7%	92%

Taxation		NA	NC	RC	С	CD	RC+C+CD
	Salary vs dividend vs retain in						
III-1 AO2	company	1%	14%	32%	42%	11%	85%
III-2 AO7	Corporate taxes payable	2%	8%	49%	36%	5%	90%
III-3 AO4	Personal taxes payable	5%	13%	26%	38%	18%	82%

### APPENDIX F

BOARD OF EXAMINERS' COMMENTS ON DAY 2 AND DAY 3 SIMULATIONS

#### **BOARD OF EXAMINERS' COMMENTS ON DAY 2 SIMULATION**

Paper/Simulation: Day 2 (ECI) – Role Case COMMON

Estimated time to complete: 300 minutes

Simulation difficulty: Average to Hard

Competency Map coverage: Management Accounting (2); and

Financial Reporting (4).

#### Examiners' comments by COMMON Assessment Opportunity (AO) for all roles

#### **AO#1 (Airport Bid – Quantitative) (Mgmt Acct)**

Candidates were asked to determine the lowest fare that ECI could bid for servicing the airport. Candidates were expected to integrate elements of variable, fixed, and opportunity costs into an incremental analysis in order to determine the true cost difference between providing service to the airport and ECI's regular service. Candidates needed to first calculate the relevant cost of ECI's existing service, then determine the marginal cost of providing service to the airport based on the conditions presented in the contract, and add this incremental cost to the opportunity cost of the revenues ECI could earn via their regular service. Candidates were expected to demonstrate their understanding of the concept of opportunity costs and relevant costing, which were considered essential to the analysis of a minimum bid price, and recommend a reasonable bid price.

Candidates used a wide variety of approaches on this AO. Some candidates focused solely on the opportunity cost figure while others performed breakeven analyses. While these alternative methods did not always result in a minimum bid price, the partial analyses showed some evidence of competence and were considered in marking this AO. Most candidates calculated a minimum bid price using a reasonable combination of variable and opportunity costs. Candidates often tended to over-complicate their calculations and made errors as a result (e.g., calculating the wrong number of kilometres travelled by a car in a year); however, this generally did not affect their overall assessment. Many candidates brought fixed costs into their cost analysis, which was considered acceptable if justified (i.e., since fixed costs comprised such a significant portion of ECI's cost structure, they should be taken into account). However, most candidates did not provide any such justification. Candidates appeared to devote a considerable amount of time to performing their calculations, and as a result may not have spent enough time on AO#2.

Strong candidates recognized that an incremental analysis was the best way to frame their analysis. These candidates focused on the relevant variable components, accounted for the opportunity costs relevant to the decision, and appropriately excluded fixed costs. Their overall calculations contained few errors, and their resulting bid price was therefore reasonable.

Weak candidates did not seem to know how to approach their calculations. They were less likely to incorporate the opportunity costs into their analyses, which were essential in determining an appropriate minimum bid price. These candidates focused instead on the various variable and fixed costs presented in the simulation, bringing every available figure into their analysis without considering whether it was relevant to the minimum bid price. Weak candidates were also more likely to have numerous errors in their calculations, and failed to integrate the various aspects of their calculations on a comparable basis. For example, these candidates did not realize that their calculations of ECI's existing costs were on a per-kilometre basis, while their calculations of the airport contract costs were on a per-trip basis. Weak candidates often simply added these calculations together to determine their bid price. As a result, their conclusions were often unreasonable, such as recommending a minimum bid price in the millions of dollars, or pennies per trip.

#### AO#2 (Airport Bid – Qualitative) (Mgmt Acct)

Candidates were asked to qualitatively assess whether winning the airport contract would be beneficial to ECI. Candidates were expected to discuss the benefits and risks of ECI accepting the airport contract, link a number of these points to the case facts presented in Appendix VI (Common), and describe the implications to ECI's overall business, integrating the industry and company information found in Appendix II (Common).

Most candidates took a balanced approach to assessing the qualitative aspects of the airport bid, considering both the benefits and risks. While these candidates often presented a long list of points, they did not always explain the implications to ECI of each one. For example, these candidates might suggest the bid was a good idea because the contract was for a fixed term, without explaining why a fixed term contract might benefit ECI (e.g., provides stable revenues in a competitive industry). However, most candidates were able to provide an implication for at least some of the points they discussed. Most candidates also generally provided an overall recommendation as to whether to pursue the contract.

Strong candidates were more likely to explain the implications of each point raised by clearly describing their impact on ECI's business. These candidates were also more likely to address the key risks, those that would directly impact ECI's bottom line, for example, that the average bid price might be lower than ECI's bid, and the contract may therefore put them in a loss position. Other strong candidates noted that ECI's fixed cost structure was higher than its competitors, which might impact the amount of its bid and lead to potential losses if the other bids are lower than ECI's.

Weak candidates were more likely to simply list a variety of points without discussing the impact on ECI, or provided a one-sided discussion of either the benefits or risks without considering the other viewpoint. These candidates appeared more concerned with providing a higher volume of points than with focusing on the key points and explaining why they were of significance to ECI. Weak candidates often repeated information that was in their calculation, such as the existence of an opportunity cost, thinking this was a qualitative discussion. Without linking it to the competition in the industry or the impact on ECI's overall business, there was little added value.

These candidates were also more likely to note the alignment of the contract with ECI's mission, vision and values. While valid, these discussion points in isolation were not considered as important to raise as other points.

#### AO#3 (Licence Impairment) (Fin Rep)

Candidates were asked to assess the current accounting treatment for ECl's taxi licences and to determine whether they are impaired because of market changes. In Appendix II (Common), Jen is satisfied that ECl's financial future is strong, given its current projections, but wonders if ECl's licences are impaired. Candidates were expected to identify the existence of several indicators of impairment, discuss the need to perform a test for recoverability to determine whether the licences were in fact impaired, and form a supported conclusion based on their analysis. The information for performing the recoverability test was provided in Appendix IV (Common).

This AO was considered a more difficult one and candidates struggled to apply the Handbook guidance. Most candidates used the case facts provided to suggest that the licences might be impaired, for example, discussing the increase in ride sharing and the declining market price for licences as indicators of impairment. Often, these candidates were aware that ASPE requires a cash flow test for recoverability and suggested doing one, but did not recognize that Appendix IV provided them with the necessary information to actually perform the test. Some even explicitly noted that they did not have the information necessary, suggesting they did not fully understand what to use to perform a recoverability test. Most of these candidates concluded consistently with their analyses, but as they did not actually perform a cash flow test for recoverability, they often concluded that they needed more information.

Some candidates used the available case facts to identify the indicators of impairment, but rather than discuss recoverability, they used case facts related to the government decision to support that the value of the licences could not be determined until the government released a decision, and concluded that there was insufficient information to determine if there was indeed impairment. Both approaches were valid.

Some candidates used IFRS to assess this accounting issue, even though the case clearly stated that ECI follows ASPE. While there are enough similarities between the two standards for these candidates to be able to provide some valid discussions, it led many candidates to focus more on the fair value of the licences (which was intentionally not provided in the case) and ignore the test for recoverability, which is an important step under ASPE.

Even strong candidates often failed to recognize they had the information they needed to perform the test for recoverability. However, these candidates were better able to explain, from a theoretical perspective, the purpose behind the test and how it would be performed, which allowed them to demonstrate their understanding of this step. In addition, strong candidates were more likely to discuss the indicators of impairment in greater depth, and how the government's pending decision or the overall business environment will impact the value of the licences.

Weak candidates often jumped directly from the indicators of impairment to a conclusion that the licences should be written down or that the fair value of the licences needed to be obtained in order to make a decision. While this conclusion was consistent with their analyses, their analyses lacked the important step of performing the test for recoverability, or at least recognizing that it was a step. Had these candidates done a recoverability test, they would have seen that it did not support a write down. Weak candidates were also likely to include lengthy discussions on whether the licences were an intangible asset, apparently thinking they were fully addressing the required since they were discussing the general accounting treatment for the licences. However, such discussions failed to integrate key information presented in Appendix II (Common), where Jen specifically wonders whether ECI's licences are impaired due to changing market conditions.

#### AO#4 (Investment in Ruby) (Fin Rep)

Candidates were asked to assess the current accounting treatment for ECI's taxi licences, and for ECI's acquisition of Ruby. Candidates were expected to identify the treatment options available within ASPE to account for the acquisition of Ruby, discuss how to apply the options and comment on the resulting impact on ECI's financial statements. They were also expected to keep in mind that ECI has a debt covenant, a detail included in the background information. Candidates were expected to source the different accounting options available to ECI from Handbook Section 1591 Subsidiaries. Candidates were told in the required that ASPE allows for accounting policy choices and therefore it was important for candidates to recognize that there were choices available (cost, equity, consolidation).

This was considered the most difficult of the common AOs. Few candidates identified and discussed all the policy choices available to ECI (cost, equity, consolidation), as many focused their discussion on the consolidation of Ruby's statements with ECI's (one of the three policy options available to ECI). Most candidates provided a discussion of consolidation using Section 1582 Business Combinations to frame their analyses. These candidates may have been influenced by the wording in the background information, which suggested that the user was interested in whether ECI could present consolidated statements. In addition, information presented in Appendix III (Common), such as the fair value differential in Ruby's assets, and the fact that taxi companies are purchased for their "reputation," may have further influenced candidates to take this approach. Some candidates spent a considerable amount of time assessing whether Ruby had been acquired; as the case facts stated that 100% of the common shares of Ruby had been acquired, this provided little value. Some candidates stopped there. Others went a step further and discussed how consolidation would take place, and attempted to calculate an amount to record for goodwill, although these calculations often failed to incorporate the fair value differential presented in the simulation. Many candidates did not discuss the fact that the investment was currently recorded at cost, and whether that was appropriate. Most also failed to consider the impact of the accounting treatment on the debt covenant.

Some strong candidates identified the accounting policy choices available to ECI and discussed the options in sufficient depth by explaining the impact on ECI's financial statements and the adjustments required, although these candidates were few in number. Strong candidates who instead focused their discussion on consolidation were able to calculate an appropriate amount to record for goodwill by incorporating the fair value bump of the assets, and discussed the process of actually consolidating the two sets of statements in sufficient depth to demonstrate their understanding of how to implement this choice. Strong candidates were also more likely to discuss the impact of the various options on ECI's debt-to-equity ratio.

Weak candidates did not go beyond the information in Handbook *Section 1582*, simply assessing whether a business had been acquired; as a result, their discussion lacked sufficient depth to demonstrate their competence. These candidates appear to have been answering a required from a prior CFE (2018). These candidates did not sufficiently describe how consolidation would be performed and often provided incorrect goodwill calculations. Some weak candidates simply copied and pasted Handbook criteria and said "met" after each of them without using case facts to analyze the criteria. Weak candidates were also more likely to incorrectly conclude that ECI had significant influence over Ruby, failing to recognize that ECI clearly had control as it had purchased 100% of the shares. In addition, many weak candidates did not address the fact that ECI had recorded the acquisition at cost.

#### AO#5 (Lease) (Fin Rep)

Candidates were asked to explain how the lease from Step 3 should be accounted for. To demonstrate competence, candidates were expected to provide a reasonable analysis of Appendix V (Common), which contained details of the proposed lease used by ECI to acquire new vehicles. Candidates were expected to analyze each of the three criteria in the relevant standard (ASPE, Handbook Section 3065), using the available case facts to support their analyses.

The lease topic should have been very familiar to candidates and they were therefore expected to do well on this AO. Most candidates correctly analyzed all three criteria and concluded as to whether the lease was an operating or capital lease. However, candidates often provided a weaker analysis of the transfer of ownership criteria, often suggesting that a bargain purchase option existed but not supporting this claim with case facts. A surprising number of candidates had errors in their present value calculations for the third criterion, such as using an incorrect number of periods or interest rate. Only a fraction of the candidates integrated how their conclusion impacted ECI's debt-to-equity ratio.

Strong candidates correctly analyzed all three lease criteria, concluded appropriately, and commented on the impact of the decision on ECI's debt-to-equity ratio. Although the useful life of the cars was not explicitly stated in the simulation, these candidates were able to extrapolate this information from the notes to the financial statements and support their assumptions appropriately.

Weak candidates were unable to correctly analyze all three lease criteria, often making an incorrect conclusion about the existence of a bargain purchase option, or performing an unreasonable calculation of the present value of the payments (e.g., by calculating a present value that was higher than the fair value of the cars). Weak candidates' conclusions were more likely to be inconsistent with their analysis, for example, suggesting the lease is an operating lease even though one of the criteria was met. These candidates were also unlikely to integrate information from the financial statements into their analysis of the second criterion, concluding that more information was needed on the life of the cars, which was correct but did not demonstrate the same level of depth as the candidate who found a case fact to support their assumption of the useful life. Some weak candidates simply copied and pasted the Handbook criteria and said "met" after each one without using case facts to analyze the criteria.

#### AO#6 (Convertible Debt) (Fin Rep)

Candidates were asked to explain how the convertible debt from Step 3 should be accounted for. To demonstrate competence, candidates were expected to provide a reasonable analysis of the information found in Appendix V (Common). Candidates were expected to pick up on the hint in the required suggesting that ASPE allows for accounting policy choices. Candidates were expected to identify that there was a debt and an equity component to the financial instrument, to realize there were options regarding the accounting treatment and to attempt a calculation of the bifurcation of the financial instrument into its separate components. Candidates could have also discussed the impact to ECI of choosing to allocate more, or less, to one of the two elements when bifurcating.

This AO was considered difficult and had the highest percentage of candidates who failed to address it at all. Those who did attempt it generally identified that there was a debt and an equity component and attempted a calculation of the split between the two components. However, these calculations often contained several errors, such as mixing up the interest rates (i.e., interest rate on bond versus market rate of similar debt), using an incorrect number of time periods, calculating the value of the equity as the difference between two present value calculations using the different rates, or assuming the liability was simply equal to the undiscounted payments. Other errors were more significant, such as concluding on a split between the components that was greater than the total value of the instrument, which rendered these analyses unreasonable.

Strong candidates identified that the convertible debt instrument had distinct liability and equity components and provided a description of the options available to ECI for recording the instrument. These candidates often attempted a calculation to illustrate how the different components would be recorded, and while these calculations often contained small numerical errors (such as the incorrect number of time periods or number of payments), they were still able to demonstrate an understanding of the issue.

Weak candidates did not identify that there were two components, and thus were unable to explain the impact to ECI, or that options existed for how to record the instrument. These candidates typically discussed the issue as though it were solely debt, often using the Handbook criteria for liabilities to analyze the issue. Paper/Simulation: Day 2 (ECI) – Role Case ASSURANCE

Estimated time to complete: 300 minutes

Simulation difficulty: Average to Hard

**Competency Map coverage:** Audit and Assurance (7 Assessment Opportunities)

Examiners' comments by Assessment Opportunity (AO) for the ASSURANCE ROLE

**AO#7 (Accounting for Stock Compensation Plans)** 

Candidates were asked to assess the accounting treatment for the stock options and stock appreciation rights that ECI granted in 2019 to its employees, and to recommend which instrument to grant in the future. Additional details on the stock compensation plans were provided in Appendix VII (Assurance). To demonstrate competence, candidates were expected to discuss the accounting treatment for either the stock options or the stock appreciation rights and provide a supported conclusion.

This was the hardest AO in the Assurance role. While most candidates were able to identify the correct Handbook section to use (ASPE 3870 Stock-Based Compensation and Other Stock-Based Payments), they struggled to apply the concepts from the Handbook to the case facts presented. The BOE specifically chose to present the two different stock compensation plans in the case due to their differing accounting treatments under ASPE. Most candidates failed to recognize that the stock options would be accounted for as equity and the stock appreciation rights would be accounted for as a liability, instead lumping both instruments together as either equity or as liabilities.

Many candidates did not use the correct values to calculate the amounts to record in the financial statements. For example, for the stock options calculation, candidates should have used \$0.35, the fair value of the stock options at the date of issuance, to calculate the initial amount to be recorded. Instead, many candidates used \$1.00, the exercise price, or \$0.75, the fair value of the options at the year-end date, in their calculations. Similarly, for the stock appreciation rights calculation, candidates should have used \$0.50, the difference between the benchmark value and the fair value of the shares at the year-end date, to calculate the amount to be recorded at year end. Instead, many candidates used \$1.00, the benchmark price, or \$1.50, the share price at year end, in their calculations.

Many candidates also did not adequately support the adjustments they made in their calculations. For example, while some candidates adjusted their calculation for the fact that only 80% of drivers are expected to still be employed by ECI in five years, or recognized that the stock options and stock appreciation rights need to be expensed over a five-year period, they did not adequately explain why these adjustments were necessary, failing to use the Handbook requirements to support their position.

Strong candidates generally recognized that the stock options and stock appreciation rights would be recorded in the financial statements as equity and liabilities, respectively. They were able to provide correct calculations of the amounts to record for the stock options and stock appreciation rights and adequately supported their adjustments with relevant accounting standards. Strong candidates also clearly demonstrated that they understood the difference between the initial and subsequent measurement for both instruments. They also generally provided a valid and supported recommendation for which instrument ECI should grant in the future.

Weak candidates generally did not demonstrate an adequate understanding of ASPE 3870. Some weak candidates did not reference the correct Handbook section at all, such as using *ASPE 3290 Contingencies* and attempting to discuss whether the stock options and stock appreciation rights met the definition of a contingent liability. Other weak candidates used the correct Handbook section but focused their discussion on whether the stock options and stock appreciation rights met the definitions set out in the Handbook, instead of focusing on how these instruments should be measured. Given that ECI did not record the instruments properly at year end, discussions that focused solely on definitions, and not on measurement, provided limited value. In addition, weak candidates generally only attempted to discuss one of the two instruments, and often did not attempt to calculate the amount to be recorded in the financial statements.

# **AO#8 (Audit Plan Critique)**

Candidates were asked to comment on the initial audit planning for ECI prepared by François. Information on François's initial audit plan was provided in Appendix VII (Assurance), and additional information that was relevant to the audit plan, such as risk factors, users of the financial statements, and possible control deficiencies, was provided throughout the case. Candidates were expected to understand the situation related to ECI and integrate specific case facts from both the Common and Assurance portions of the case in their critique of the audit plan. To demonstrate competence, candidates were expected to provide an audit planning memo that addressed the deficiencies in François's initial audit plan, including a more complete and/or more technically correct discussion of risk, materiality and approach.

Candidates performed relatively well on this AO. Most candidates provided a reasonable risk discussion that included several risk factors in addition to those that François had already provided, explained how each factor impacted the risk of material misstatement, and concluded on the overall financial statement risk. The most commonly discussed risk factors were the debt-to-equity covenant from the bank, that ECI had never been audited before, that there were already several accounting errors noted and that ECI was currently unprofitable, leading to potential management manipulation of the financial statements. Most candidates also recognized that François was incorrect in basing his materiality assessment on risk and using a net loss as the materiality benchmark. Candidates provided a reasonable materiality analysis by discussing multiple users of the financial statements and choosing an appropriate alternative benchmark for materiality that would address the users' needs, and calculating a planning materiality using an appropriate percentage, given their selected benchmark. In addition, most candidates generally attempted to discuss the audit approach suggested by François, but struggled to explain why François's reasoning was inappropriate, or to include relevant case facts to support their recommended audit approach.

Strong candidates provided more risk factors in their risk assessment and often provided better explanations for the impact each of those factors would have on the risk of material misstatement. For materiality, strong candidates also identified more of the relevant users and provided a more in-depth discussion of each user's needs. They often justified both the benchmark they chose that would reflect the users' needs, as well as why they chose a specific percentage within the acceptable range by linking their choice to the sensitivity of the users. Some strong candidates also discussed other components to consider in materiality, such as performance and specific materiality. Strong candidates were also able to provide better audit approach discussions, by specifically addressing why a first-time audit does not preclude the use of a combined approach, and often also discussed why a substantive or combined approach might be appropriate, using specific case facts. For example, some candidates suggested a combined approach, given that the QC team concluded there were no deficiencies on the controls that cover the significant risks to ECI's operations.

Weak candidates generally did not provide an adequate risk assessment, either because they identified an insufficient number of risk factors, or simply listed risk factors without explaining how they would impact the overall financial statement risk. Some weak candidates also provided business risk factors instead of focusing on financial statement risk factors, and therefore had difficulty providing a useful analysis. Weak candidates also often provided materiality discussions that contained technical errors. For example, some used an inappropriate/unusual benchmark, such as net current assets. Others used an inappropriate percentage, given their chosen benchmark, such as proposing that 5% to 10% be used for a gross benchmark such as revenue. In addition, many did not adequately discuss the users and their needs, and often did not justify the use of either the benchmark or the percentage chosen with relevant case facts. For the audit approach, weak candidates often did not justify their chosen approach with an adequate explanation or incorporation of relevant case facts. Overall, weak candidates often noted that François's conclusions were appropriate in one or more areas, when there were clear deficiencies in each of François's assessments of risk, materiality and approach.

#### **AO#9 (Procedures – Accounting Issues)**

Candidates were asked to recommend audit procedures for the ECI and Ruby accounting issues to be addressed. To demonstrate competence, candidates were expected to provide a reasonable number of procedures that would address the specific risks related to the accounting issues identified.

Candidates performed adequately on this AO. Most candidates were able to provide a sufficient number of procedures that appropriately addressed the specific risks related to the accounting issues. The most commonly addressed procedures were related to the impairment of the taxi licences, the Ruby acquisition and the lease. Candidates were less likely to address procedures related to convertible debt or the stock compensation plans.

Strong candidates were able to provide precise and well-described procedures that were clearly tied to the significant risks identified in their accounting analysis. Strong candidates covered more of the accounting issues and provided more procedures for each, addressing the different risks. Many 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, which made it difficult to determine exactly what they were proposing to do and what risk they were trying to address. Weak candidates tended to only address the typical risks for those accounts that were impacted by the accounting issue identified. For example, many weak candidates proposed testing the cost of the taxi licences by vouching to purchase agreements. However, given that the most significant risk for the taxi licences was related to impairment, a better procedure would have been to test the fair value of the licences. In addition, weak candidates were more likely to simply recalculate amounts on the financial statements or rely on management inquiry, instead of trying to provide procedures that would obtain third-party evidence.

# AO#10 (Accts Receivable and PP&E Review)

Candidates were asked to review François's audit work on the accounts receivable (A/R) and property, plant and equipment (PP&E) balances. Information on François's audit work was provided in Appendix VII (Assurance). Candidates were expected to discuss the various deficiencies related to the work, including François not having obtained sufficient, appropriate audit evidence and having working papers that do not tie to the balances being audited, and provide additional audit procedures to address the deficiencies. To demonstrate competence, candidates were expected to discuss the deficiencies in sufficient depth and provide a sufficient number of audit procedures to address those deficiencies.

Candidates performed adequately, given that this AO was expected to be more challenging for candidates, as they were asked to critique the work of a junior, which is more difficult. Most candidates recognized that there were significant deficiencies in François's audit work, although many struggled to adequately explain why the work was not sufficient. For example, many candidates noted that François only performed management inquiry, but did not further explain why this was an issue, that is, that this is not sufficient, appropriate audit evidence. However, most candidates were able to provide several additional audit procedures that should have been performed over A/R and PP&E to address the deficiencies in François's work. Candidates most commonly suggested confirmations and subsequent receipts procedures over A/R, and suggested vouching the PP&E additions to third-party evidence, such as invoices.

Strong candidates were able to first adequately explain why the work performed by François was not sufficient, for example, that minimal changes to an account balance is not sufficient justification for not performing additional audit work, and that there was excessive reliance on management, and then provided valid, well-explained additional audit procedures to be performed. Strong candidates typically provided more procedures covering the different risks of A/R and PP&E, for example, covering existence, completeness and valuation.

Weak candidates often did not provide a complete analysis. For example, some would point out deficiencies in the audit work but not provide any recommendations on additional procedures that would need to be performed. Others provided procedures to be performed but did not address why François's work was insufficient. Some weak candidates recognized the deficiencies in François's work but provided procedures that would not address the deficiencies. For example, some commented that François should not rely solely on management inquiry but only proposed more management inquiry procedures. In addition, some weak candidates focused on the presentation of the working papers, for example, suggesting that different tick marks should be used or that the working paper should be signed off with initials, rather than commenting on the work itself, which provided little value.

## **AO#11 (Ruby Royalty Controls)**

Candidates were asked to explain how Ruby's drivers might not pay the full amount of royalties owed and discuss what internal controls could be implemented to ensure that Ruby receives all royalty revenue. Information on taxi fares and related processes was provided in Appendix VII (Assurance). Candidates were expected to note some of the major weaknesses in the processes related to the taxi meters, the cheques from drivers bouncing, and the lack of A/R follow-up. To demonstrate competence, candidates were expected to discuss how the Ruby drivers may be avoiding paying the full amount of royalties owed as a result of weaknesses in some of these areas, and make some recommendations for internal controls that should be in place.

Candidates performed adequately on this AO. This internal controls AO was more challenging when compared to prior years, given that the processes to be discussed were more integrative in nature. Candidates needed to take the time to understand the processes being used in order to perform well on this AO. Most candidates were able to identify and adequately explain some of the ways Ruby might not be receiving all the royalty revenue, and provided valid recommendations to address the issue. However, they sometimes struggled to provide specific recommendations that took into consideration the constraints set out by the case. For example, related to A/R follow-up, many candidates recommended that ECI simply follow up more frequently on A/R, without acknowledging that the case clearly states that the accountant did not have enough time to do so.

Strong candidates were able to identify multiple ways that Ruby might not receive all of the royalty revenue. For example, instead of explaining only one way manual logs would cause issues, strong candidates would identify multiple ways, such as that logs may be unintentionally filled out incorrectly, or that drivers may purposely not record a trip even if they turn the meter on. They were also able to provide more valid and specific recommendations for each issue they identified. As a result, their discussions demonstrated more depth of analysis.

Weak candidates often did not focus on the most significant issues related to the royalty process, which was that the fare information would not get to Ruby. Instead, they focused on the minor issues associated with some of the processes presented. For example, weak candidates would often discuss the risk of having drivers use a variety of meters. Compared to the fact that there are multiple ways that drivers can not record trips on the manual logs, this is a minor issue. In addition, the recommendations they provided were often vague and were often already performed by Ruby. For example, some weak candidates suggested that drivers be required to issue receipts; however, based on the case facts presented, this was already being done. In addition, weak candidates often confused ECI and Ruby, recommending, for example, that Ruby withhold amounts from the drivers' pay, when Ruby drivers are not in fact employees of ECI. Recommendations like these were of limited use to Ruby, making it difficult to demonstrate competency in this area.

## **AO#12 (Procedures – Airport Contract)**

Candidates were asked to describe the procedures an external auditor would perform in order to provide an audit-level *CSAE 3530 Attestation Engagement to Report on Compliance* report to the Calgary Airport Authority. Information related to the required performance measures to be met was provided in Appendix VII (Assurance). To demonstrate competence, candidates were expected to provide a reasonable number of procedures that addressed the specific performance measures.

Candidates performed relatively well on this AO. Most candidates attempted to provide procedures for most of the performance measures. The procedures provided by candidates were generally adequate for several of the areas they attempted. The most commonly addressed performance measures were the agreed-upon fare, the insurance requirements and the inspection requirements. Candidates struggled the most with providing a valid audit procedure related to the customer complaints performance measure.

Strong candidates often provided procedures for all the performance measures and were able to provide precise and well-described procedures that clearly addressed the risk related to each measure. Instead of considering only one aspect of the performance measure, they often provided more complete procedures to test all aspects of the performance measure. For example, strong candidates recognized that the measure related to inspections involved several elements, including the timing (quarterly) and type of inspection (100-point).

Weak candidates often provided procedures for a fewer number of the performance measures, and the procedures provided were often vague. For example, some weak candidates stated that insurance documents need to be obtained for each vehicle without explaining what the auditor would do with that documentation. Weak candidates also often provided only procedures related to management inquiry, and often did not seek out third-party evidence to test the performance measures.

# AO#13 (Reliance on QC Team)

Candidates were asked to draft a memo to address whether an external auditor would be able to rely on the work of the QC team, and if not, to make recommendations that would ensure that this is possible going forward. Information on the QC team was provided in Appendix VII (Assurance). Candidates were expected to apply the concepts from CAS 610 Using the Work of Internal Auditors to assess the QC group and note the various ways that reliance may not yet be possible, in the areas of objectivity, competence and systematic approach. To demonstrate competence, candidates were expected to discuss some of these areas, determine whether an external auditor would be able to rely on the work of the QC team, and provide some recommendations for the team going forward.

Given that this AO was expected to be more challenging for candidates, as this is an area where entry-level CPAs would likely have less exposure, candidates performed adequately. Most candidates understood the areas that would have to be assessed for an external auditor to rely on the QC team, and applied the relevant case facts to their analysis. Most candidates also gave some valid recommendations for the QC team going forward. The most commonly discussed issues were François's competence, the lack of review of the reports and Jen asking the QC team not to question Ruby's management.

Strong candidates attempted more of the issues, tackling the more challenging ones, such as the reporting structure of the QC team and the fact that Jason does not use a systematic approach for deciding what to review. They were more likely to go through the specific requirements noted in *CAS 610* and conclude on whether each requirement was met, instead of only drawing an overall conclusion on the ability to rely. The recommendations provided by strong candidates were also typically more detailed and specific. For example, instead of suggesting that the QC team not report to the controller, strong candidates would specify who the QC team should report to, for example, an audit committee.

Weak candidates displayed various technical weaknesses on this AO. Some argued that *CAS 610* did not apply because ECI had a QC team rather than an internal audit team. Others did not recognize that there was a specific Handbook section that applied, and generally only identified the weaknesses in the QC team without discussing how these weaknesses would impact the ability to rely on the QC team's work. There were also some weak candidates who concluded that external auditors could rely on the QC team's work, despite some significant weaknesses that were present in the QC team. Weak candidates also often focused on the minor issues presented, for example, suggesting that the lack of formal documentation related to the roles and responsibilities of the team members was the most significant issue, when there were much more significant issues that needed to be addressed first. Therefore, these discussions did not provide much value.

Paper/Simulation: Day 2 (ECI) – Role Case FINANCE

Estimated time to complete: 300 minutes

Simulation difficulty: Average to Hard

**Competency Map coverage:** Finance (7 Assessment Opportunities)

Examiners' comments by Assessment Opportunity (AO) for the FINANCE ROLE

# AO#7 (Cash Budget)

Candidates were asked to prepare a five-year cash budget for the combined ECI and Ruby entities in order to determine when ECI can repay Jen's shareholder loan. ECI's financial projections were provided in Appendix IV (Common) and Ruby's financial projections were provided in Appendix VII (Finance), and candidates were instructed to use them as provided. To demonstrate competence, candidates were expected to provide a reasonable five-year cash budget for ECI and Ruby that incorporated several adjustments, and conclude on when Jen's shareholder loan could be repaid. Information from the Common role, such as the electric car lease and electric limousine convertible debt, could have been integrated into the cash budget through the adjustments.

Candidates performed as expected on this AO. Most candidates started with the net income or EBITDA of ECI and Ruby, and adjusted for depreciation where appropriate, for cash outflows related to debt items—typically, the PFB loan and mortgage—and made some attempt at an income tax calculation; however, there were sometimes errors in the tax calculation, such as an incorrect tax rate or application to a tax base other than pre-tax income. Most candidates also concluded on when Jen's shareholder loan could be repaid, consistent with their cash flow forecast.

Strong candidates provided a five-year cash flow forecast for ECI, including Ruby, by starting with net income or EBITDA, and adjusting more often for appropriate elements. These adjustments included depreciation where appropriate, cash outflows related to debt items—including the PFB loan and mortgage—and other items from the Common appendices, such as the lease on the electric cars or convertible debt on the electric limousine taxis, and a reasonable attempt at an income tax calculation for both companies, using an appropriate tax rate applied to pre-tax income. The inclusion of the leases and convertible debt demonstrated better integration with the Common role. Strong candidates also concluded on when Jen's shareholder loan could be repaid, consistent with their cash flow forecast.

Weak candidates attempted a five-year cash flow forecast for ECI which often, but not always, included Ruby, but made no, or an incorrect, depreciation adjustment to get from net income to EBITDA. Some weak candidates attempted to build a cash flow forecast from the top down, starting with revenues and costs rather than with net income/EBITDA, despite there being insufficient case facts to do so. In addition, some weak candidates did not conclude on when Jen's shareholder loan could be repaid.

# AO#8 (Required Rate of Return (WACC)

To support an analysis of two ride-sharing options, candidates were asked to determine ECI's required rate of return. Additional information regarding ECI's capital budgeting policy and market information was provided in Appendix VII (Finance). To demonstrate competence, candidates were expected to calculate the required rate of return using WACC, incorporating a reasonable debt/capital ratio, cost of debt and cost of equity. Candidates were expected to integrate information from various appendices to select appropriate comparable companies, and articulate and justify their selections.

Candidates performed as expected on this AO. Most candidates calculated the required rate of return using WACC, incorporating most components of WACC correctly, such as the risk-free rate, market risk premium, beta, debt/capital ratio and cost of debt. In selecting the beta and/or debt/capital ratio, most candidates utilized information from at least one comparable company and used the business description to explain why it was comparable. Candidates typically focused on one factor, such as their location or ownership of licences.

Strong candidates also calculated the required rate of return using WACC by incorporating most components of WACC correctly. However, in selecting the beta and/or debt/capital ratio, strong candidates used case facts and integrated various appendices to articulate why each company was, or was not, comparable to ECI. In supporting their selections, strong candidates often considered multiple facets of ECI's operations, such as its location or model of operation.

Weak candidates attempted to calculate the required rate of return using WACC, but applied the formula incorrectly or did not incorporate many components correctly, for example, by applying beta to the size premium or applying the debt-to-equity ratio incorrectly in the WACC formula.

#### AO#9 (Ride-sharing – NPV –Quant)

Candidates were asked to assess two options for ECI to expand into the ride-sharing industry— ECI could develop its own app or team up with Ryde Corporation—and to provide a recommendation. Information regarding these options was presented in Appendix VII (Finance). To demonstrate competence, candidates were expected to select and apply appropriate capital budgeting techniques and utilize case facts, incorporating the upfront costs, annual revenues and operating costs in their calculation, to determine which option would be better for ECI from a quantitative perspective.

Candidates performed the strongest on this AO. Most candidates calculated the net present value of both the Ryde Green and EcoCab ride-sharing programs, including some of the relevant elements in their calculation, such as upfront costs, annual revenues, annual expenses and income taxes, and applied the required rate of return calculated in the previous AO.

Strong candidates calculated the net present value of both the Ryde Green and EcoCab ride-sharing programs, including more of the relevant elements in their calculation. Strong candidates also performed better income tax calculations by considering the income tax impact of the upfront costs and the ongoing income, and utilizing an appropriate tax rate. Strong candidates also performed a sensitivity analysis based on the number of rides, which demonstrated integration of qualitative information in their analysis.

Weak candidates attempted a variety of quantitative analyses, such as contribution margin, payback period, return on investment or annual cash flow budget. Those weak candidates who attempted a net present value calculation had many missing or incorrect elements and often made technical errors, such as incorrectly calculating the annual revenues/royalties, excluding key annual operating expenses, excluding upfront costs or making incorrect income tax calculations.

#### AO#10 (Ride-sharing - Qual)

Candidates were asked to assess two options for ECI to expand into the ride-sharing industry— ECI could develop its own app or team up with Ryde Corporation—which required a qualitative analysis. Information regarding these options was presented in Appendix VII (Finance). To demonstrate competence, candidates were expected to provide a qualitative assessment of both Ryde Green and EcoCab that considered several relevant qualitative factors based on the case facts, and provide a supported conclusion on which ride-sharing option ECI should pursue. A discussion of qualitative factors that demonstrated the benefits of one option over the other, for example, Ryde's experience or ECI's existing electric car driver pool, was considered to be more relevant to the analysis. Candidates were also expected to include both advantages and disadvantages in their assessment.

Candidates performed weaker than expected on this AO. Candidates who interpreted the required correctly compared the Ryde Green and EcoCab ride-sharing programs by discussing a reasonable number of advantages and disadvantages of each program, such as Ryde's experience and customer base, and ECI's existing electric vehicle driver pool and control over the app, and concluded consistently on which option ECI should pursue. Some candidates misinterpreted the required and discussed whether ECI should pursue ride sharing in general. Although not part of the required, this discussion could add value to the candidate's response as it often highlighted some of the relevant considerations.

Strong candidates provided a detailed qualitative comparison of the Ryde Green and EcoCab ride-sharing programs by discussing more advantages and disadvantages of each program. Strong candidates also focused their discussion on qualitative factors that demonstrated an understanding of the difference between the two options. For example, rather than simply stating that ride sharing aligns with ECI's vision, strong candidates would state that EcoCab better aligns with ECI's vision because its payment structure is more consistent with that of ECI. Strong candidates' discussions were well balanced between advantages and disadvantages and they provided a supported conclusion on the option that ECI should pursue.

Weak candidates only provided a discussion of whether ECI should pursue ride sharing in general. Those weak candidates who discussed Ryde Green and EcoCab generally provided a list of case facts with no explanation of why these were advantages or disadvantages of either option, or repeated the same considerations in support of both options, for example, stating that both Ryde Green and EcoCab were consistent with ECI's vision. Some weak candidates also failed to conclude on which option ECI should pursue.

# **AO#11 (Financing Program Risks)**

Candidates were presented with a proposal to incentivize more drivers to participate in the new ride-sharing program by ECI offering financing for the purchase of electric vehicles. Candidates were asked to discuss the financial risks associated with this proposal and recommend how ECI could mitigate these risks. Information on the proposed financing program was presented in Appendix VII (Finance). To demonstrate competence, candidates were expected to identify and discuss several financial risks for the proposed financing program, and provide mitigation strategies for their identified financial risks.

Most candidates performed reasonably well on this AO. They typically identified and discussed the credit checks, down payment, security and interest rate differential. Most candidates provided mitigation strategies for the financial risks they identified.

Strong candidates discussed more of the financial risks, including less common risks such as the liquidity of second-hand cars with high mileage and the risk of drivers leaving the program, and provided good, realistic mitigation strategies for the risks identified, For example, strong candidates recognized that SafeBank might not allow ECI to register an equivalent lien on the vehicle, but ECI could reduce its risk by requiring annual reduced principal payments in Years 1 to 5.

Weak candidates identified some financial risks but did not explain why they were risky for ECI, and sometimes did not provide mitigation strategies for the risks. Some weak candidates discussed only the easier financial risks, such as lack of credit checks or no down payment requirement, often without providing depth in their discussion.

#### **AO#12 (Class B Conversion Value – Quant)**

Candidates were presented with a proposal from Ethan to invest \$5 million for newly-issued Class A or Class B preferred shares. Candidates were asked to calculate the conversion value of the Class B preferred shares at the end of 2024 and the percentage of ECI's common shares that Ethan would own after conversion. Information regarding these options was presented in Appendix VII (Finance). This AO relates to the first part of the required, which was to calculate the conversion value of the preferred shares. To demonstrate competence, candidates were expected to calculate the value of ECI, including Ruby, in 2024, and divide by the number of outstanding shares to arrive at the conversion value of the preferred shares. Candidates were expected to apply the capitalized EBITDA methodology to calculate ECI's enterprise value using the five times current EBITDA multiple provided in the case required, and adjust for preferred shares and outstanding debt, including the mortgage and shareholder loan, to arrive at ECI's equity value. When valuing ECI, candidates could integrate their cash flow budget prepared in AO#7.

Candidates struggled the most with this AO, which was considered a hard AO. Most candidates calculated a conversion value of the Class B shares by dividing the value of ECI by the number of outstanding shares. Many candidates, however, applied an incorrect valuation method, starting with net income, cash flows or net assets, or applied an incorrect multiple/discount rate. Fewer candidates valued ECI using an appropriate valuation method, being the capitalized EBITDA method, incorporating both ECI and Ruby. Often, they made no adjustment to enterprise value to arrive at equity value.

Strong candidates calculated the conversion value of the Class B shares by valuing ECI using the capitalized EBITDA method, incorporating both ECI and Ruby, and sometimes also considering the conversion percentage for Ruby. Strong candidates made appropriate adjustments to the enterprise value (outstanding debt, shareholder loan consistent with their AO#7 analysis, preferred shares) to arrive at equity value, and provided a per-share conversion value, dividing the value of ECI by the number of outstanding shares.

Weak candidates attempted a valuation of ECI using an inappropriate method (i.e., a valuation method other than the capitalized EBITDA method as an EBITDA multiple was provided), excluding Ruby in the valuation, or applying an incorrect capitalization base (net income, cash flows). Some candidates utilized ECI's net assets in valuing ECI, which is not appropriate, given that ECI is a growing company that is expected to generate positive income in the future. Even though the required asked candidates to calculate the conversion value of the Class B shares in 2024, some weak candidates valued ECI in 2019.

# **AO#13 (Investment Options)**

Candidates were asked by Jen to advise her on which of Ethan's investment options to accept. To support this decision, candidates were also asked by Raymond to calculate the conversion value of the Class B preferred shares at the end of 2024 and the percentage of ECI's common shares that Ethan would own after conversion. This AO focuses on advising which class of preferred shares Jen should offer Ethan, and the percentage of ECI's common shares that Ethan would own after conversion if Class B preferred shares were issued. Additional information regarding the two classes of shares was presented in Appendix VII (Finance). To demonstrate competence, candidates were expected to provide a reasonable calculation of Ethan's post-conversion ownership, discuss some of the factors that differentiate the two classes of preferred shares, such as the board seats, control and dividends, and provide a recommendation regarding the best investment option.

Candidates performed weaker than expected on this AO. Most candidates provided a reasonable calculation of Ethan's ownership percentage on a post-conversion basis, discussed some relevant factors, such as the dividend requirement on Class A shares, and Ethan's post-conversion influence over ECI through his ownership and ability to nominate board members, and suggested which class of preferred shares ECI should offer Ethan, consistent with their analysis.

Strong candidates provided a similar calculation of Ethan's ownership percentage on a post-conversion basis, consistent with their response to AO#12, but demonstrated more depth in their discussion of the relevant factors by, for example, linking the dividend requirement to ECI's growth and capital expenditures, and integrating Jen's desire to retain control over ECI to the impact of Ethan's post-conversion influence over ECI. Strong candidates clearly suggested which class of preferred shares ECI should offer Ethan, consistent with their analysis.

Weak candidates made no attempt to calculate Ethan's ownership percentage on a post-conversion basis or attempted one using book value of equity, or provided a list of factors without explaining why they were relevant to the investment decision. Some weak candidates did not offer any advice on which class of preferred shares ECI should offer Ethan.

Paper/Simulation: Day 2 (ECI) – Role Case PERFORMANCE MANAGEMENT

Estimated time to complete: 300 minutes

Simulation difficulty: Average

**Competency Map coverage:** Performance Management role (7 Assessment Opportunities)

Examiners' comments by Assessment Opportunity (AO) for the PERFORMANCE

**MANAGEMENT ROLE** 

## **AO#7 (Indifference Point Between Two Business Models-Quant)**

Candidates were asked by Raymond to calculate the number of trips that Ruby would need to make per day, using the ECI business model, to generate the same profit as it would under Ruby's current model. Candidates were told that moving Ruby to ECI's business model entails incurring significantly higher fixed costs while at the same time lowering variable costs. Candidates were expected to integrate information found in the description of the two business models in Appendix II (Common). Additional quantitative information useful for the candidates was presented in Appendices III and V (Common). Appendix III presented information on the newly acquired Ruby while Appendix V mentioned the quantitative elements related to conversion of Ruby's business model (step 3 of the plan). To demonstrate competence, candidates were expected to determine the indifference point between the two business models, using a logical approach to calculate the number of trips required to earn the same net income under both models. This approach generally consisted of comparing the fixed costs Ruby would incur and the unit contribution it would earn per trip, under both models. Dividing the differential fixed costs by the differential unit contribution margin results in the number of rides required to earn the same profit under both models.

A large number of candidates misinterpreted the required and thought they needed to calculate the number of trips that Ruby would need to make under the ECI business model in order to have the same net income it currently generates (\$250,000 for a two-month period), rather than the number of trips it would require in order to earn the same net income if it kept its current business model. This approach deviates from the original required, but was considered acceptable. Candidates could determine the fixed costs Ruby would incur if it used the ECI model, add them to the net income Ruby currently earns, and divide the total by the unit contribution margin obtained, using the ECI model for Ruby.

This was the hardest AO in the Performance Management role. Although the required tested a basic introductory management accounting concept, the AO was more difficult for the candidates because the scenario was unusually complex (two companies, two different business models, a recent acquisition not yet fully integrated), and because the relevant information was sprinkled throughout many different sections of the case. While most candidates were able to identify the need to segregate fixed costs from variable costs and attempt a calculation of Ruby's unit contribution margin using the ECI business model, they struggled, often making errors in their performance of the calculation. Most candidates failed to recognize that the ECI business model generated higher fixed costs but lower variable costs per trip, even though the case clearly mentioned it, and therefore failed to calculate an indifference point between the two business

models, which is what Raymond was really asking for. Instead, having misinterpreted the required, many candidates attempted to calculate the number of trips required for Ruby to generate the same net income using the new ECI model as it did for the first two months since its acquisition by ECI (\$250,000 for two months, or \$1.5 million for an entire year). Many candidates made errors in segregating the fixed costs form the variable costs. The most common mistake was to consider the drivers' salaries as a variable cost, even though, under the ECI model, Ruby's drivers would be paid an hourly wage for a predetermined 40-hours a week. Also, many candidates were internally inconsistent in their calculation, calculating some costs on a per-month basis, some costs on a per-car basis and other costs on an annual basis.

Strong candidates generally calculated either the true indifference point between the two business models, or the number of trips required for Ruby under the ECI model to generate the same net income as it currently generates, using a valid approach, as outlined above. They generally segregated the costs between fixed and variable in a reasonable way, calculated the unit contribution margin per trip under the ECI model, and used these two inputs to calculate the number of trips required.

Weak candidates generally failed to understand the underlying management accounting concepts and therefore were unable to either calculate an indifference point, or the volume required to generate a targeted profit. Some weak candidates calculated numerous potentially valid inputs, but never attempted to incorporate them in a useful analysis. Other weak candidates made so many errors or omissions in the calculation that it made it of limited value to the client. Other weak candidates failed to understand that the calculation was to be performed for Ruby, and instead calculated the number of rides ECI would have to generate to have the same net income as Ruby does currently, essentially doing the calculation for the wrong company. In addition, some weak candidates incorrectly used information from Appendix VI (airport bid) in their calculation. For example, they used the number of cars that would be waiting at the airport (40) instead of the entire Ruby fleet (200), and they used the airport fare calculated for the longer airport trips rather than the average fare of \$21 applicable to shorter, normal trips. Finally, some weak candidates did not seem to know how to approach their analysis and, after an initial attempt, moved on to the next one without completing it.

### **AO#8 (Compare Two Business Models – Qual)**

Candidates were asked by Raymond to compare ECI's and Ruby's current business models at an operational, financial and strategic level, taking into consideration Jen's environmental concerns and ECI's overall strategic direction. Candidates were asked to recommend which model to adopt going forward. Information on both business models was presented in Appendix II (Common), and other useful information, such as the presence of a new type of competitor (ride-sharing apps), the opportunity for government funding, the required capital costs of implementing the ECI model for Ruby, was provided throughout the case. In their comparison of the two models, candidates were expected to understand the characteristics of both models and integrate specific case facts from both the Common and Performance Management sections of the case. For example, they were expected to integrate the fact that the ECI model implied that the cars and licences would be owned by Ruby instead of by the drivers, that numerous new electric cars would have to be purchased, and that the salary expense would become a large fixed cost rather than a variable cost if it was decided that Ruby would be adopting the ECI model

going forward. To demonstrate competence, candidates were expected to provide not only a description of the difference between the two models, but also an analysis of the consequences for ECI and Ruby going forward, taking into account their internal and external environment, ECI's financial situation and its strategic direction.

Candidates found this AO difficult. Many candidates were unable to provide the required integration and high-level business thinking that was necessary to perform well on this challenging AO. Most candidates gathered the relevant case facts to provide a descriptive comparison of the two models, and although they often identified the riskier nature of the ECI model, they nevertheless recommended keeping the ECI model and transforming Ruby to it in order to remain strategically consistent with ECI's mission, vision and values. Most candidates realized that the ECI model would provide the drivers with a more predictable income and better working conditions, and that this was consistent with ECI's and Jen's desire to improve working conditions in the industry. However, most candidates were unable to go beyond the most obvious consequences of selecting one business model over the other, typically the ones that were clearly mentioned in the case. The most commonly discussed differences were the fixed nature of the costs, the need for capital investments and the better working conditions for the drivers under the ECI model.

Strong candidates provided a more analytical comparison of the two models and were able to integrate the comparisons made to other aspects of ECI's internal and external environment. For example, they integrated: the need for capital investments under the ECI model to the debt-to-equity covenant present in ECI's current financing; the impact the choice would have on ECI's eligibility for funding under the Policy (AO#9); the added risk generated by additional fixed costs to the competition coming from ride-sharing apps and Jen's lack of financial return on her investment so far and the additional funds she had to contribute in 2019; and the issues noted by customers with respect to driver behaviour and performance (AO#12).

Weak candidates generally did not provide an adequate analysis of the difference between the two models, either because they limited their comparison to a list of case facts without explaining how these facts would impact ECI and Ruby going forward or because they analyzed an insufficient number of differences between the two models, often limiting themselves to two topics mentioned in the case (the ECI model generates more fixed costs and provides better working conditions). Some weak candidates seemed unsure what was meant by "business models," even though both business models were clearly described in Appendix II. These candidates compared the companies themselves (ECI and Ruby) rather than comparing the business model under which they operated.

# AO#9 (Fit of ECI's Strategy with Policy)

Candidates were asked by Raymond to provide Jen with arguments for how ECl's vision and strategy fit with the Policy's goals, and to explain why ECl and Ruby were eligible for funding from the financial support plan contained in the Policy. Excerpts of the Policy were provided in Appendix VII (Performance Management). The excerpts presented the detailed targets set by the Policy in order for the province to achieve its goals, as well as the criteria used to determine whether businesses were eligible for funding. To demonstrate competence, candidates were expected to do two things: 1) assess whether ECl's vision and strategy were a fit with the Policy's goals and targets; and 2) determine if ECl and Ruby were eligible for funding by applying the various criteria to the relevant case facts. For each funding criterion, the candidates were expected to assess whether it was currently met, and use case facts to support their assessment.

Candidates performed well on this AO. The information was clearly laid out in the appendix, and most candidates used a methodical approach to analyze, point by point, the fit between ECI's vision and strategy and the Policy's goals and targets, and compliance with the Policy's funding criteria. Most candidates attempted to analyze each funding criterion mentioned in the Policy in order to assess ECI's and Ruby's compliance with it.

For the first part of the required, strong candidates were able to provide an analysis of the fit between ECI's vision and mission and the specific targets mentioned in the Policy (reduction in greenhouse gas emissions, gas consumption, sales of fuel-consuming vehicles, kilometres driven for personal use and poverty). For the second part of the required, they were able to explain, applying specific case facts to specific criteria, why ECI and Ruby met or did not meet the various funding criteria mentioned in the Policy.

Weak candidates provided, for the first part of the required, a vague or general analysis of the links between ECI's vision and mission and the Policy's goals and targets. For example, they merely mentioned that both ECI and the Policy had environmental objectives, without going into anything specific from the Policy, such as reduction in emissions or reduction in personal kilometres driven. For the second part of the required, they provided little or no support when determining whether a criterion was met, often only mentioning the criteria and then labelling each one as being "met" or "not met," with no support for this assessment. Others provided support that probably would not be convincing enough for the government officials to award the funding, as they were not addressed in a way that would present ECI and Ruby in a positive light. Weak candidates also sometimes made mistakes in applying some of the criteria, namely the criterion about Alberta control (addressing the location of the business itself rather than focusing on who controls it). In addition, some weak candidates provided vague, generic arguments to support their assessment of whether a specific criterion was met. For example, they would mention that ECI is in fact controlled by an Alberta resident or entity, but did not explain how they reached that conclusion.

# AO#10 (EEEV's Proposal)

Candidates were asked by Raymond to give their opinion on the governance implications of a funding proposal from a private equity fund (EEEV) operated by a large firm in the oil and gas industry. The details of the proposal were presented in Appendix VII (Performance Management). Candidates were expected to address the potential issues created for Jen and ECI by EEEV's requirements in terms of representation on the board and its committees, limitations to ECI's dividend policy and capital expenditures, the priority of the financing, and on the general fit between the two companies. To demonstrate competence, candidates were expected to identify and discuss several consequences of this financing proposal in a manner that would adequately address Jen's concerns about maintaining ECI's current mission, vision and strategic direction.

Candidates performed adequately on this AO, given that it dealt with governance issues, which entry-level CPAs are generally less familiar with. Most candidates recognized that Jen's influence in the business that she created would be significantly reduced going forward if this proposal was accepted. Most candidates recognized that ECI's executive committee would be effectively controlled by EEEV, which would significantly limit Jen's influence in policy setting, and her ability to authorize the purchase of capital assets for ECI in the future. However, most candidates failed to realize that there was an important misalignment of values and objectives, given that EEEV was controlled by a large business in the oil and gas industry, whose strategic objectives are in exact opposition to ECI's current, environmentally-friendly vision.

Strong candidates acknowledged the important potential conflict of interest and differing objectives, two sets of values, and that many clauses in the proposal had the consequence of reducing Jen's power in ECI and giving significant power to people selected by EEEV. The fact that they were able to take a step back and detect the overarching issue behind the proposal enabled them to analyze and explain more clearly the adverse consequences of the various governance-related clauses of the proposal.

Weak candidates not only generally missed the overarching issue but often gave very generic recommendations for how governance should generally be structured, and proceeded to compare the clauses in the proposal to this governance theory rather than to the case-specific issues generated by the proposal's clauses. Despite the fact that the case included little information about ECI's current board or governance policies, their analysis was concentrated on minor technical elements, such as the even or odd number of board members, and the presence of accounting expertise on the board. In addition, some weak candidates presented their response in a weakness-implication-recommendation (WIR) format, which was not the best approach, given the required. Making recommendations for each clause of the proposal were not appropriate in this context, as the client simply wanted an opinion on the governance implications of the proposal, not suggested modifications to it. Finally, some weak candidates presented their responses in a "pros and cons" format, which often consisted of case facts labelled as pros or cons, with little support or added value to the client.

# **AO#11 (Maintenance Options)**

Candidates were asked to address a decision being analyzed by ECI concerning maintenance of its vehicles. Currently, maintenance of the cars is done in the drivers' neighbourhoods with ECI reimbursing the costs to its employees. If ECI adopts a more centralized model, two options are being considered: 1) creating an in-house maintenance division that would service all ECI cars; or 2) outsourcing this activity to a contracted third-party, Lassonde, which currently operates many service stations in Alberta. The details concerning the two options and the status quo were presented in Appendix VII (Performance Management). Candidates were expected to calculate the average annual cost under each of the three options (the two alternatives considered and the status quo) and provide qualitative considerations to support which option to pursue. To demonstrate competence, candidates were expected to provide a reasonable quantitative analysis, which required them to display understanding of basic management accounting concepts, such as the treatment of irrelevant costs, sunk costs and the difference between the relevance of one-time costs and recurring costs. To identify the most economical option, they were expected to calculate the average annual cost for all options. Candidates were given many costs related to the in-house maintenance division, and were expected to exclude the irrelevant costs from their analysis and properly incorporate one-time costs through a depreciation calculation, a pay-back period, a net present value or any other logical way to consider them in their quantitative analysis. They were also expected to integrate their understanding of the industry and the company, based on information presented elsewhere in the case, to provide some valid and case-specific qualitative elements to support their recommendation.

Candidates performed adequately on this AO. Most candidates were able to present a reasonable comparison of the three options in terms of costs. The calculations for two of the three options were relatively straight-forward. The case provided the variable and fixed components of the current maintenance costs, and candidates simply had to apply these numbers to ECI's 150 cars, to determine the maintenance costs incurred by ECI under the current plan. For the outsourcing option, the case provided information on the way the prices were to be determined in the three years of the proposed contract, and the estimated ranges of estimates for the three years. Candidates simply had to compile the calculation correctly and incorporate the growth rates to the two scenarios presented (high and low). The most challenging aspect of the quantitative analysis was to determine the average annual cost of creating an internal division to perform the work. Candidates needed to appropriately segregate one-time costs from recurring ones and incorporate the one-time costs in their calculation while ignoring the sunk and irrelevant costs included in the appendix. In additional to the quantitative analysis, most candidates attempted a qualitative analysis, and the depth and breadth of that analysis was often what distinguished the strong candidates from the weak ones. The qualitative discussion, however, was more challenging. The candidates had to integrate their understanding of the industry and the company, based on information presented elsewhere in the case, to come up with valid discussion elements to support their final recommendation.

Strong candidates were able to perform a reasonable calculation of the average annual cost for all options, including the most challenging, in-house option, as well as identify multiple case-specific qualitative elements to support one option, which were often integrated to other AOs or sections of the case. For example, strong candidates linked the servicing decision to the

eligibility for the funding from the Policy (AO#9), to the business model selection for Ruby (AO#8) or the issues concerning drivers' performance noted by customers (AO#12), or even to the airport bid decision (Common AO#2). Some strong candidates noted that the option to internalize the maintenance operations would add even more fixed costs to a business model that already included many of them. Some mentioned that the internalization would give ECI more control over the quality of work performed, which would alleviate some of the issues mentioned by dissatisfied customers concerning the general condition of the vehicles. Others linked the location of the Lassonde service centres to their proximity to the Calgary airport.

Weak candidates often made numerous conceptual mistakes in the calculation of the annual cost of the in-house option, such as adding recurring costs to one-time costs, ignoring the initial one-time costs altogether, or including irrelevant or sunk costs in their analysis. For example, some weak candidates added the one-time capital costs of the land, equipment and building expansion to the additional operating costs of Year 1 (salaries, property taxes, supplies), and compared this inflated cost for Year 1 to the annual cost for each of the other two options for that same year. Others included the entire salary of the administrative manager, instead of only incorporating the additional salary they would be getting because of their new tasks. Some weak candidates did not incorporate the variability of the annual costs under the outsourcing scenario and limited their analysis to one year, when the proposed contract with Lassonde had a three-year term. In terms of a qualitative analysis, most weak candidates did not incorporate any qualitative elements at all, or listed generic items that were not specifically linked to the car maintenance analysis. Also, some weak candidates simply repeated in a narrative form sections of their quantitative analysis, calling those comments "qualitative" without really adding anything to the quants themselves. The use of the WIR template proved again to be detrimental to the quality of the qualitative responses of some weaker candidates, who gave recommendations within each option on how to improve current operations, without realizing that they were analyzing options that had not already been implemented.

#### **AO#12 (Drivers' Compensation)**

Candidates were asked by Raymond to assess the incentive and risk-sharing properties of the current employment agreement for ECI's drivers (a fixed hourly salary) and its impact on drivers' behaviour. Raymond also asked candidates to analyze the relative merits of three alternative driver compensation plans prepared by his consulting firm. The details of these plans were presented in Appendix VII (Performance Management). The appendix also presented information on customer comments on current driver behaviour, as well as some of Jen's objectives in terms of business development for ECI. To demonstrate competence, candidates were expected to provide an assessment of the current compensation plan, linked with the issues raised by customers and with the business development objectives mentioned by Jen. They were also expected to analyze all three alternative options developed by the consulting firm, from the same perspective. Candidates were expected to demonstrate both breadth and depth on this AO. Breadth consisted of making sufficient valid and case-specific observations about the four plans, and depth was displayed by explaining the merits or shortcomings of the observations with respect to its incentive and risk-sharing properties.

Candidates performed relatively well on this AO. Most candidates attempted to analyze the current system as well as the three proposed replacement plans, making reasonable links to customers complaints and Jen's objectives, and assessing whether these four plans incentivized drivers to improve their performance. Most candidates presented their response in a "pros and cons" format, which proved to be an effective way to respond to this required. Most candidates recognized that, in order to achieve the incentive to perform that Jen was hoping for, a company-wide, profit-sharing plan (option #1) was less effective than driver-specific performance measures (options #2 and #3). They also realized that a compensation solely consisting of a commission (option #3) was somewhat similar to the rest of the taxi industry's business model, and despite its favourable impact on incentivizing drivers to improve their performance and achieve Jen's objectives in terms of business development, conflicts with Jen's strategic objective of providing decent working conditions for ECI's drivers.

Strong candidates presented numerous valid observations for each of the four plans, most of them linked with either the issues noted by the customers or Jen's objectives in terms of business development for ECI. They stressed the importance of evaluating performance on the basis of elements drivers could control, which led most of them to discard option #1, which based driver compensation on ECI's overall profit and was composed of many elements outside of the drivers' control. Most strong candidates opted for option #2, the best combination of the performance incentives and Jen's strategic values of providing a comfortable working environment for ECI's drivers.

Weak candidates generally used a bullet-point format to respond, which limited the depth of their analysis; in many instances, the "pros and cons" listed consisted of only two or three words, which prevented the candidate from articulating a full thought or linking with Jen's objective of assessing the various plans' incentive and risk-sharing properties. Other weak candidates' responses lacked breadth, and the candidates were not able to generate enough different observations to fully support their recommendation. Other weak candidates analyzed each plan from the sole perspective of the drivers, and generally opted for the plan that made the drivers earn the highest compensation, without ever considering ECI's or Jen's perspectives.

#### AO#13 (High-speed Link Strategy Fit)

Candidates were asked by Raymond to recommend, from a qualitative standpoint only, whether a \$1 million investment in seed funding for additional studies on the development, construction and operation of a high-speed link between Edmonton and Calgary was a good strategic decision for ECI. Candidates were told ECI will be granted exclusive access to the Edmonton and Calgary terminals of the link. A description of the high-speed link project was presented in Appendix VII (Performance Management). First, candidates were expected to understand the unique nature of the proposed investment: in exchange for the \$1 million investment, ECI would not be getting a stake in the project, whether it be stocks or any kind of contract promise to be reimbursed with interest. Instead, ECI would be getting exclusive access to both terminals, which would potentially generate additional taxi rides and fares. Then, candidates were expected to identify the risks and opportunities of this proposal in order to determine if it constituted a good strategic decision for ECI. To demonstrate competence, candidates were expected to identify some valid observations, specific to the proposal and ECI's context, and explain them in a way that adequately supports a recommendation for the client.

Candidates performed adequately on this AO. Most candidates were able to identify the most obvious opportunities and risks associated with the investment, i.e., the link was environmentally friendly on two fronts: it took polluting cars off the highway and used an environmentally-friendly source of energy, all of which fit perfectly with ECI's ecological mission and vision. They also noted that the investment amount was relatively high and that, considering ECI's current cash situation, the timing of this proposal might not be the best.

Strong candidates were able to identify less obvious elements, which were generally linked with their good understanding of the unique nature of the investment, i.e., the increased taxi business generated in the long run, as well as the long-term relationships that could be created with the regular users of the link, in conjunction with Jen's business development objectives. Also, they noted the uncertainty of the link ever being completed because of lack of financing, eventual possible cost overruns, or unfavourable results arising from the upcoming studies being financed by ECI's money. Strong candidates' thoughts were generally well explained, providing greater support for their recommendation.

Weak candidates' responses were generally very short. They presented a list of pros and cons of the projected investment, without further explanation. Also, the number of different ideas were generally limited. More importantly, most weak candidates failed to grasp the unusual nature of the investment. They seemed to be under the impression that ECI would own the link itself, which generated numerous observations that provided little or no value for the client. Further, some weak candidates appeared to have run out of time.

Paper/Simulation: Day 2 (ECI) – Role Case TAXATION

Estimated time to complete: 300 minutes

Simulation difficulty: Average to Hard

**Competency Map coverage:** Taxation (7 Assessment Opportunities)

Examiners' comments by Assessment Opportunity (AO) for the TAXATION ROLE

## **AO#7 (Acquisition of Control)**

Candidates were asked to help Jen ensure that the accumulated loss carryforward of Ruby could be used after its acquisition by ECI. Information about the acquisition was provided in Appendix III (Common). Appendix VII (Taxation) also provided Ruby's financial information for the 10 months ending October 31, 2019, that is, up to the date of the acquisition. To demonstrate competence, candidates were expected to discuss some of the implications of the acquisition of control on Ruby. This could include the use of the non-capital losses, the capital losses, as well as the implications on Ruby's assets where fair values differed from cost.

Candidates performed reasonably well on this AO. Most candidates identified that non-capital losses can only be carried forward against income from a same or similar business, briefly discussing that Ruby is continuing its existing taxi business, and then identifying that capital losses cannot be carried forward. Most candidates also typically either identified that accrued losses, such as those on the office equipment, were deemed to be recognized immediately, or identified the availability of an election to bump fair value on assets with accrued gains.

Strong candidates discussed the non-capital and capital loss limitations and considered the specific case facts associated with both. They also usually correctly discussed the need to recognize accrued losses immediately and identified the availability of a bump for assets with accrued gains.

Weak candidates often stated that all assets are deemed to be disposed of at the date of the acquisition of control or attempted the more common discussions with technical errors, for example, mixing up the capital and non-capital losses. Weak candidates also often attempted to repeat the loss sharing AO discussion from the 2019 Day 2 case, Tax role, recommending inappropriate planning techniques, such as amalgamation, wind-up, or use of section 85, rather than addressing the acquisition of control issues.

#### AO#8 (Ruby - Taxable Income)

Candidates were asked to calculate Ruby's taxable income for the two-month period ending December 31, 2019. Ruby's net income figure for this period was provided in Appendix III (Common). Additional details about Ruby's expenses and capital assets for the two months ending December 31, 2019, were provided in Appendix VII (Taxation). As part of the information for the 10 months ending October 31, 2019, candidates were also provided with ending undepreciated capital cost (UCC) information as at October 31, 2019, earlier in Appendix VII (Taxation). To demonstrate competence, candidates were expected to perform a calculation of taxable income, considering some of the significant adjustments to income. Candidates were

expected to include a calculation of capital cost allowance (CCA) for the period, considering some of the relevant transactions for the period.

Candidates performed very well on this AO. Most candidates calculated taxable income, considering most of the easier adjustments, such as amortization, meals and entertainment, golf dues, financing fees, donations and dividends, and performed a detailed calculation of CCA, factoring in the additions and dispositions as well as the accelerated investment incentive. Calculations were generally well supported, although many adjustments did not require much explanation.

Strong candidates calculated CCA and taxable income, including most of the easier adjustments as well as some of the more difficult income adjustments, such as the loss carryforward or the mortgage interest, and correctly prorated the CCA for the short year. Strong candidates also often integrated the results of their AO#7 analyses into the opening figures (UCC, loss carryforwards) for this AO.

Weak candidates attempted to calculate taxable income and CCA and generally had several of the income adjustments correct in their calculations. However, they often made errors in their CCA calculations, commonly placing additions and disposals in the wrong classes, misapplying the accelerated investment incentive and failing to pro-rate CCA for the short taxation year.

## AO#9 (Ruby – Taxes Payable)

Candidates were asked to provide a detailed calculation of federal income taxes payable for the two-month period ending December 31, 2019. This request was part of the request for AO#8, and candidates were expected to use the taxable income that they calculated in AO#8 as a starting point. Additional details about Ruby's expenses and capital assets for the two months ending December 31, 2019, were provided in Appendix VII (Taxation); this included information about the rental income earned on its office building and dividends received and paid during the year. To demonstrate competence, candidates were expected to calculate income taxes for Ruby. They were expected to provide a calculation that showed they understood the different types of taxation on business, investment and dividend income for a CCPC.

Candidates struggled on this AO. Candidates took a variety of approaches and were rewarded for demonstrating they understood the concepts, regardless of how they presented their calculation. Many candidates used the detailed approach to calculating the various components of taxes payable (base rate, provincial abatement, small business deduction, etc.), and demonstrated their understanding by applying the different components to the appropriate income amounts. Other candidates took a "shortcut" approach, applying a low rate and high rate to business and investment income, respectively. Those who took the shortcut approach often lacked some of the details necessary to show that they understood the concepts, but could still demonstrate their competence if they applied reasonable rates to appropriate amounts.

Strong candidates calculated income taxes payable using the detailed method, usually using appropriate rates and applying the different components of taxes payable to appropriate amounts (business income, investment income, dividend income).

Weak candidates either did not attempt this AO at all or attempted it without considering any of the key elements of the income taxes calculation. Weak candidates frequently did little more than apply a single tax rate to all income. Often the rate chosen was not even explained, and those that attempted a rate often provided inappropriate explanations. Many stated that they "assumed" a tax rate because they were not provided with one. Others argued that Ruby would not qualify for the small business deduction even though it clearly would; arguments were often based on flawed technical knowledge. For example, many candidates believed that a corporation needed to be a small business corporation in order to claim the small business deduction, presumably confusing this with the requirement to be a CCPC. Others picked random facts from the case to suggest that no SBD was available, such as the existence of a GRIP balance or RDTOH, or the existence of a small amount of rental income.

## **AO#10 (Shareholder Compensation)**

Candidates were told that, to date, Jen has not personally taken any money out of ECI. In the requirements page, they were told that Jen expects ECI will begin to accumulate cash after it starts earning more money and getting more financing, and that she wants to receive \$100,000 in the first year in which this occurs. The financial statements provided in Appendix I (Common) and the background information indicated that Jen had invested \$1,000 in share capital and \$2 million in loans to ECI to date, and information about ECI's and Ruby's respective tax and financial situations was provided throughout the case. Candidates were expected to explain to her, from a tax perspective, the options for taking excess cash out when it becomes available, and to recommend the best way to do so. To demonstrate competence, candidates were expected to consider several alternatives for compensating Jen. Candidates were expected to demonstrate that they understood the concept of tax integration, even if implicitly, and to have a "planning" focus to their discussions by considering items beyond a typical "salary versus dividend" discussion.

Although they often struggled to provide insight or depth to their analyses, candidates performed reasonably well on this AO. Most candidates explained to some degree the major differences in the tax treatments of salaries and dividends, for both the corporation and the shareholder, although their discussions were often generic and did not incorporate the specific information in the case, such as the \$100,000 amount suggested or the RDTOH balances in Ruby. Many candidates additionally identified the ability to repay the shareholder loan to Jen, which was insightful.

Strong candidates provided additional depth to the salary/dividend discussion by considering what kind of dividend would be paid to Jen and/or by attempting a calculation of the tax consequences. They also usually discussed the ability to repay the shareholder loan to Jen, clearly explaining the tax consequences. Strong candidates usually identified an additional planning measure, such as the ability to defer taxes through the use of a bonus, and provided a valid recommendation.

Weak candidates attempted to discuss the salary and dividend options in a generic fashion without considering many case facts. They often made technical errors, which suggested that they did not understand the fundamental concept of tax integration, for example, recommending that Jen be paid by dividend because dividends have a lower tax rate. Poor responses, if they identified a third alternative at all, often suggested loaning money to Jen, which would neither achieve her desire to receive cash nor provide any tax advantages; given that ECI owed Jen \$2 million, this also illustrated that candidates had not considered the case facts.

# AO#11 (Drivers as Employees)

Candidates were told that, in the implementation of Step 3, the conversion of Ruby's business model to match ECI's, Ruby's drivers will become employees. They were asked to discuss the tax implications to the drivers of the change in status from contractor to employee. Candidates were provided with additional information about this change in Appendix VII (Taxation), including information about expenses the drivers would incur as employees and what would happen to the taxis after the conversion. In this appendix, candidates were also told that the drivers were curious about the deductibility of these specific expenses as well as whether they would be able to keep claiming input tax credits on the GST/HST paid. To demonstrate competence, candidates were expected to consider several of the implications of the change to employee status, including at least one of the more in-depth items, such as the change in use of the taxis, the availability of GST/HST ITCs or the employee GST/HST rebate.

Candidates performed well on this AO. Most candidates attempted to discuss the tax treatment of the specific expenses identified (car cleaning, golf shirts, and supplies), often identifying the general requirements for deducting employee expenses but not addressing the specific nature of the expenses. Most candidates also addressed the drivers' concern about access to GST/HST input tax credits, either by explaining that ITCs were not available to individuals who were not making taxable supplies or by describing the employee GST/HST rebate.

Strong candidates usually discussed the three specific expenses for drivers, usually getting into the specific nature of at least one or two of them, and discussing the GST/HST implications of becoming employees by explaining that ITCs were not available but that there was an income tax credit available, the employee GST/HST rebate. They also usually addressed the potential sale of the taxis and the tax implications thereof.

Weak candidates attempted an analysis of whether the drivers would be employees or contractors, concluding that they would be employees, which was already made clear in the case. Weak candidates often attempted to discuss the three specific expenses but usually listed all three in the same sentence and concluded that they definitely could or could not be deducted, without any analysis. Weak candidates rarely attempted to address the implications of the change in status, such as the sale of taxis or GST/HST implications.

# **AO#12 (Employee Benefits)**

Candidates were asked to explain the tax implications, to both the drivers and ECI, of six proposed employee benefits. In Appendix VII (Taxation), the benefits were described briefly. To demonstrate competence, candidates were expected to discuss several of these benefits by explaining the tax implications for both the employees and the employer. Candidates were expected to provide more than simply a correct answer; a brief explanation of why the item was taxable, not taxable, deductible, or not deductible was expected.

Candidates performed well on this AO. Most candidates identified all six benefits, attempting to explain whether they were deductible to the employer and whether they were taxable to the employees. Most candidates usually attempted to explain why the benefits were deductible and/or taxable, and were usually correct on most of them. They also usually provided some extra depth to their discussion of the stock options, identifying the ability to defer the income inclusion and the availability of the stock option deduction.

Strong candidates identified all six benefits, explaining whether they would be deductible to the employer and why they were taxable to the employees, and clearly explaining why they came to that conclusion. Good responses usually explained the stock options in more depth, addressing not only the deferral and the deduction but also the taxable capital gain on the eventual sale of the underlying shares. They also usually provided more depth on the other benefits, such as explaining the availability of the medical expense credit for employee health premiums, or the alternative to include long-term disability premiums in income in exchange for reduced tax on eventual benefits.

Weak candidates often simply provided a table or list of the different benefits, stating very briefly whether they were taxable or deductible without any explanation of why. They often only addressed some of the benefits, and rarely provided any additional depth on the more complex issues.

# AO#13 (QSBC Share Planning)

Candidates were told that, with the acquisition of Ruby, ECI's shares might no longer qualify as qualified small business corporation shares. They were asked to analyze the impact of the purchase of Ruby on Jen's ability to utilize the lifetime capital gains deduction, should she sell ECI in the future. In Appendix I (Common), they were provided with ECI's financial statements. In Appendix III (Common) they were provided with information about the acquisition of Ruby, which included information about the fair market values of its assets as well as the rental income earned on its building. Additional information about the Ruby acquisition was provided in Appendix VII (Taxation). To demonstrate competence, candidates were expected to identify the QSBC share criteria, and to recognize that Ruby's rental property or investments were non-qualifying assets and would have an impact on Jen's ability to use the lifetime capital gains deduction.

Candidates struggled the most with this AO. Most candidates attempted to identify some of the QSBC share criteria, often coming up with incorrect ones, and attempted to apply at least one of the criteria, often the 24-month holding period, to the case facts. Most candidates did not identify the problem with Ruby's rental property or investment portfolio, and candidates rarely attempted a calculation of ECI's asset test to determine if Ruby would have any impact on it at all.

Strong candidates identified the four QSBC share criteria, usually getting most of them correct, and attempted to apply them to the case facts. They usually either attempted a calculation of one of the asset tests at either the ECI or Ruby level, but rarely both, or attempted to explain why Ruby's investments or real estate would disqualify it from SBC status. Strong candidates also often attempted to provide a way to purify the corporations to improve the situation, although their recommendations were not always practical.

Weak candidates, if they addressed this AO at all, often went straight to a conclusion, often simply stating there was no problem or concluding that there was definitely a problem, but not providing much depth beyond that. Some attempted to restate their technical knowledge about the lifetime capital gains deduction, such as the current limit, which is provided in the exam booklet, rather than addressing whether Jen's shares in ECI would qualify.

#### **BOARD OF EXAMINERS' COMMENTS ON DAY 3 SIMULATIONS**

Paper/Simulation: Day 3, Case 1 (Jump)

Estimated time to complete: 80 minutes

Simulation difficulty: Average

**Competency Map coverage:** Financial Reporting (1);

Taxation (1);

Management Accounting (1);

Finance (1);

Strategy and Governance (1); and

Assurance (1)

## **Examiners' comments by Assessment Opportunity (AO)**

## AO#1 (Cash Basis versus ASPE) (Fin Rep)

Candidates were advised that Jump uses cash basis accounting, and that Matt is considering adopting ASPE. Candidates were asked to explain the difference between cash basis and ASPE, and to describe, from a qualitative standpoint only, the nature of the changes Matt will need to make to the income statement if he switches. To demonstrate competence, candidates were expected to provide a reasonable analysis of the difference between cash basis and ASPE, and explain a few of the changes that would need to be made to the income statement under ASPE. Candidates were provided with a draft income statement prepared on the cash basis in Appendix I, which they were expected to use to address the nature of the changes that would need to be made.

Candidates performed adequately on this AO. Most candidates explained the difference between cash basis and ASPE, which requires accrual accounting, in a way that the client could understand. Most candidates also provided a recommendation to Matt as to whether he should switch to ASPE, and explained why. Most recommended a switch to ASPE on the basis that it would be more useful for potential buyers, should Matt decide to sell the business. Most candidates also successfully provided enough examples of what would need to change in the income statement when using accrual accounting, touching most frequently on revenue and capital assets. Those candidates explained that the credit card revenue would have been recognized in 2019 instead of 2020, and that the computer software and trampolines that were purchased during the year would have to be capitalized and amortized over their useful lives instead of being expensed.

Strong candidates demonstrated their understanding of the difference between cash basis and ASPE by clearly explaining the accrual method. They also discussed impacts of adopting ASPE that were specific to Jump, by appropriately explaining the transition to ASPE on specific income statement accounts, usually by using the 2019 financial statements as an example. Strong candidates tended to cover more income statement accounts when discussing the impact of the switch to ASPE, and integrated more case facts. In addition to the typical accounts discussed by the average candidate, they often discussed the prepaid insurance and the payroll accrual from December 28 to 31.

Weak candidates often attempted to discuss the difference between cash basis and ASPE but were unable to develop their thoughts beyond identifying that ASPE requires accrual accounting. Some weak candidates did not explain the specific differences between cash basis and ASPE, and instead discussed the general impacts on the income statement, usually providing general statements, for example, stating that expenses needed to be accrued, without further explanation.

# AO#2 (Salary or Dividends or Retain Money in the Company) (Tax)

Candidates were asked to discuss whether Matt should pay himself a dividend instead of a salary or whether he should retain the money in the company. There was no specific appendix that candidates were directed to. To demonstrate competence, candidates were expected to discuss some of the differences between paying a dividend and a salary, such as whether it was deductible to the company, taxed personally, how it was taxed, whether it generated RRSP room, its impact on CPP, and other personal benefits such as child care. Candidates could also address planning considerations, such as whether to pay a mix of salary and dividends, or explain how the integration concept works.

Candidates performed adequately on this AO. Most candidates were able to recognize the differences between salary and dividends from a taxation perspective, and most commonly addressed the tax treatment of the salary for the corporation and for Matt, the dividend gross-up and corresponding tax credit, as well as the impact on CPP and on RRSP of choosing between a salary and a dividend. Although some candidates discussed higher-level taxation concepts, such as identifying how integration works and how taxation could be deferred by leaving funds in the company, most candidates limited their discussion to the simpler concepts of how salary and dividends are taxed.

Strong candidates included several of the tax considerations when paying salary or dividend and demonstrated a correct understanding of those considerations. Many strong candidates also discussed the integration concept, explaining that the tax system is built in such a way that, when looking at the corporate and personal taxation combined, there is no difference between paying a salary or a dividend. Many candidates also discussed the impact of leaving the money in the company, since this was one of the options Matt proposed. Very few candidates suggested a mix of paying salary and dividend.

Weak candidates did not address enough of the differences between the payment of a salary or dividend, or only performed a superficial analysis, demonstrating an incorrect application of tax concepts. Weak candidates lacked technical knowledge, for example, stating the dividend tax credit would be applicable to Jump, when it actually applies at the personal level and not at the corporate level. Some candidates suggested keeping the money in the company, but discussed it from a business perspective rather than from a tax perspective, explaining that it would be better for Matt to leave the funds in Jump, for future business expansion. These candidates did not discuss that it would defer taxation, and why this could be beneficial to Matt from a taxation perspective.

# **AO#3 (Variance Analysis) (Mgmt Acct)**

Candidates were asked to explain why operating income is so much lower than the budgeted amount. The draft cash-basis income statement for the year ended December 31, 2019, was provided in Appendix I, as well as the budgeted amounts for the same period. Information related to why the variances occurred was spread throughout the case, and candidates were expected to integrate various case facts to address this AO. To demonstrate competence, candidates had to provide reasonable explanations for some of the variances through application of case facts and integrating their analysis of the internal control weaknesses, for example, recognizing that the lack of oversight could be a reason for the variances from budget.

Candidates performed adequately on this AO. Most candidates drew upon the more obvious case facts to explain the variances. For example, they suggested that the weather had an impact on revenues, that the use of social media to advertise reduced the need for advertising in newspaper and radio, that the increased number of injuries impacted the legal fees, and that the additional supervisors were the cause of the increased salary expense. Most candidates failed to integrate the control weaknesses or the decreased oversight into their explanations, which the BOE had hoped they would do.

Strong candidates included good breadth in their response by addressing multiple variances, with reasonable explanations linked to case facts. These candidates often recognized the impact of the internal control weaknesses on the variances. For example, they discussed how the entry procedure of marking an "x" on someone's hand or the ability of customers to stay longer without paying might have impacted total revenue reported, or how the mats were being worn out faster than expected.

Weak candidates did not address enough of the variances, often addressing just one. These candidates were also unable to discuss the correct cause of a variance. Many of them incorrectly focused on ASPE adjustments to try to explain the variances. For example, they linked the salary variance to the lack of salary accruals, and the revenue variance to the \$20,000 receivable from the credit card company that was not accounted for. These candidates failed to recognize that the budget had also been prepared on a cash basis. Other weak candidates focused their response on identifying the variances rather than on explaining the cause, adding little value for Matt.

# AO#4 (Cash Flow Projection) (Fin)

Candidates were told that Matt was considering an expansion through franchising. They were asked to determine whether the franchising operations would require additional funding. They were provided with details relating to a loan the bank would extend on page 1, and additional information, such as the number of franchises, timing, and details of the royalties, in Appendix II. To demonstrate competence, candidates were expected to prepare a multi-year cash flow analysis that considered a reasonable number of inflows, such as the bank loan, royalties, franchisee loan repayments and interest collection, and a reasonable number of outflows, such as the loans to franchisees, bank loan repayment and interest payments.

Candidates struggled on this AO. While most candidates presented a multi-year cash flow, they struggled to incorporate sufficient cash inflows and outflows for their analysis to be meaningful. Candidates most often included the inflow from the bank loan, the outflow from the loans to the franchisees, repayments of the bank loan and the inflows from the royalties. Most candidates' responses were missing important elements, such as the interest inflow and outflow, and the inflow related to the loan repayment from the franchisees. Although the majority of the candidates attempted to calculate the royalty inflows, only about one-half of the candidates managed to provide a calculation that was reasonable.

Strong candidates included sufficient elements in their calculation, and their calculation of each element contained fewer errors. In particular, they were able to accurately calculate the royalty fee, and did well in their calculation of the interest paid and received, since it took into account the declining balance of the loans. These candidates also demonstrated that they understood what was required, as they then concluded as to whether there was sufficient funding from a cash flow perspective.

Weak candidates provided an incomplete cash flow projection that incorporated few inflows and outflows, often only including the bank loan inflow of \$1.2 million and the franchisee loans outflow of \$1.4 million, stating that the \$200,000 difference was the additional funding that was required. These candidates ignored the royalties, loan repayments and interest. Weak candidates' calculations often had multiple errors in the royalty fee calculation or simply omitted royalties from their calculation. Other weak responses used the wrong finance tool in their analysis, which resulted in a conclusion that did not address the required. For example, some of these candidates used a net present value calculation to conclude whether the project was profitable. This type of analysis did not address the client's request, as they could not answer whether the franchising operations would require additional funding.

### AO#5 (Risks with Franchisee Agreement) (Strat & Gov)

Candidates were asked to explain the risks of a draft franchise agreement and provide suggested revisions. Candidates were provided with the draft franchise agreement in Appendix III. To demonstrate competence, candidates were required to discuss some of the risks associated with the agreement and recommend appropriate revisions.

Candidates generally performed well on this AO. They were able to demonstrate a reasonable coverage of the risk areas, the more commonly addressed being liability, marketing and brand recognition, and expansion restrictions. Most candidates provided a complete discussion of the risks identified by recognizing the impact these risks would have on Jump, and discussing the revisions Jump could propose to the agreement. Candidates typically addressed the risks using a weakness, implication, recommendation approach that proved to be effective. Recommendations for each risk were generally practical and mitigated the risk, such as transferring the payment of legal and marketing costs to the franchisee, reducing the number of kilometres for the expansion restrictions and having input in the potential sites and sales.

Strong candidates discussed several risks, usually over many areas, explained the impact or implication of the risk to Jump, and proposed revisions to the draft agreement. They usually addressed more areas of concern, such as liability, brand recognition and marketing, expansion restrictions and the high degree of autonomy of the franchisee.

Weak candidates often suggested revisions to the agreement without first explaining the impact of the risk identified. Other weak candidates identified the risk and explained their implications, but instead of providing specific recommendations for each risk, simply recommended not to go ahead with the agreement.

## AO#6 (Control Weaknesses) (Assu)

Candidates were asked to address any control weaknesses identified during the site visit and to recommend improvements. This request was not provided on page 1 with the other requests but was located in the notes of Appendix I. In Appendix IV, candidates were provided with notes that CPA had made during a site visit. To demonstrate competence, candidates were required to identify some of the control weaknesses, explain their implications, and provide recommendations.

Candidates performed well on this AO. They were able to demonstrate breadth by identifying sufficient control weaknesses, recognizing the implication these would have on Jump, and discussing the improvements Jump could implement. Candidates typically addressed several control weaknesses, often choosing to apply a weakness, implication, recommendation approach that proved to be effective. Candidates were most comfortable discussing the placement of the till key, lack of refund approval, lack of proof of payment for the entrance and duration of the stay.

Strong candidates discussed several control weaknesses, explained the impact or implication of them on Jump, and provided a recommendation to address the control weaknesses. They provided more fulsome discussions in which the recommendations addressed the weaknesses they had identified.

Weak candidates often provided a recommendation without first explaining the implication of the weakness identified. Some candidates provided controls that did not completely address the weakness identified, such as having the till employee keep the key in their pocket rather than beside the till. Although it mitigated part of the risk, it did not completely address the risk identified. Others suggested implementing a segregation of duties for the weekly deposits, not realizing that Matt would not be stealing from himself. Some candidates provided recommendations that were not practical, such as having all customers stop jumping and clear the trampoline area every hour so that they could be counted, to ensure that they had paid for the right duration.

Paper/Simulation: Day 3, Case 2 (Festival)

**Estimated time to complete:** 90 minutes

Simulation difficulty: Average

Competency Map coverage: Management Accounting (2);

Finance (1); Assurance (1);

Strategy and Governance (1); Financial Reporting (1); and

Taxation (1)

## **Examiners' comments by Assessment Opportunity (AO)**

#### AO#1 (Recoverable Cost Allocation – Quant) (Mgmt Acct)

Candidates were asked to recommend ways to improve the recoverable cost allocation without reducing the total fees collected by Festival Inc. (FI), and to explain how their recommendations would affect two of the 2019 vendors. Candidates were provided with information about the current fee structure of the company, which had two components, a recoverable cost component and a component based on the percentage of the vendor's gross sales. Details relating to the fee structure and the factors influencing each activity, as well as information for two vendors, were presented in Appendix I. To demonstrate competence, candidates were expected to recommend a better way to allocate the costs to be recovered from the vendors using activity-based costing. They had to demonstrate why this method would be a more appropriate way to allocate the costs between vendors, and calculate the impact on the two 2019 vendors.

Candidates performed well on this AO. Most candidates calculated the activity-based costing rates using the cost drivers provided in note 1 of Appendix I. Most candidates attempted to calculate all four rates and made very few errors in their calculations. Some candidates also provided a qualitative discussion to explain why activity-based costing was more appropriate for allocating the costs of resources than the current method of charging \$25,000 per vendor. Others compared the vendor fees they calculated based on their new allocation to the flat fee of \$25,000, and discussed whether it was fairer in relation to the vendor's usage of resources. Many candidates failed to recognize that Smooth Treats was only onsite for 14 days and not the full 31 days of the festival, and failed to take that into account when calculating the cleaning and maintenance fee for Smooth Treats.

Strong candidates provided accurate calculations of all four rates, applied them to the 2019 example vendors, recognizing that Smooth Treats only spent 14 days onsite compared to JoJo's stay of 31 days, and correctly incorporated that proration in their calculation of the cleaning and maintenance fees. They also provided a more in-depth discussion of the fairness of this allocation in comparison with the current method.

Weak candidates either did not provide a calculation or provided an incomplete activity-based costing allocation that incorporated few of the cost drivers. Weak candidates did not demonstrate an understanding of the actual method used or how to improve it by allocating resources based on the vendor's usage, and were therefore not able to provide FI with useful information.

## AO#2 (Percentage of Gross Sales Fee) (Mgmt Acct)

Candidates were asked to discuss whether a fee structure based purely on a percentage of a vendor's gross sales would be suitable for FI and to calculate the percentage that the client would have had to charge in 2019 to get the same revenue as with the current fee structure. Candidates were given the revenue information in Appendix I, which provided the breakdown of revenue obtained from the admission fee, the recoverable cost and the percentage of gross sales. Candidates also needed to identify the vendors' total gross revenue, which was provided in note 2 of Appendix I. To demonstrate competence, candidates were expected to calculate the correct percentage of vendors' gross sales to be charged by dividing the total revenue to be replaced by the gross revenue of all the vendors combined. Candidates also had to build an argument as to whether this new structure would be suitable for FI.

Candidates struggled on this AO. While the majority of candidates attempted to calculate a percentage of gross sales to charge vendors in order to get the same revenue, it appeared that some candidates were unclear on which components of revenue to include in their calculation. Some candidates incorrectly included the admission fees in the revenue to be replaced. In addition, many candidates struggled to discuss whether this proposed fee structure was suitable for FI. They often repeated the same arguments they discussed in AO#1, instead of focusing their discussion on the removal of the fee structure component (recoverable costs allocation) that allowed FI to recover costs. In addition, candidates seemed confused about their role and to whom they were providing the information, as they often addressed factors from the vendors' perspective, forgetting to also address the proposed change from FI's perspective. For example, they would sometimes mention that the allocation would be unfair to vendors who are not using as many resources but generating a lot of revenue, without considering that the risk of a completely variable fee structure was lying entirely with FI.

Strong candidates correctly calculated the percentage of gross sales to charge vendors, and provided further information by also calculating what the fee would be for the example vendors if this new fee structure was used. They often compared the result to the fee they had calculated based on activity-based costing. Their discussion was well balanced between the vendors' and FI's perspective, explaining how the vendors would react to the increased fees, and the impact for FI of only charging a variable fee.

Weak candidates provided a calculation that was difficult to follow. Instead of using the total gross sales from all vendors, many weak candidates based their calculation solely on the example vendors' gross sales. Weak candidates struggled to provide an insightful qualitative discussion about the fee structure that went beyond stating that it would be unfair to the vendors.

# AO#3 (Cash Flow Management) (Fin)

Candidates were told that Juan loaned FI cash for paying its bills because they were due before FI had collected the majority of revenue from the vendors. Candidates were also told that a friend suggested that Juan obtain a personal line of credit against the equity in his home. Candidates were asked to provide advice to Juan on how to better manage cash flows. There were references in the case as to when funds were collected and when bills were due. In Appendix I, it was mentioned that "both vendor fee components were billed in August," and within the required, it read, "because they were due before FI had collected the majority of revenue from the vendors." To demonstrate competence, candidates had to recommend valid options that would provide FI with money before the festival occurred, allowing FI to better align the collection of funds with the timing of bill payments.

Candidates struggled on this AO. Candidates were required to think creatively in order to identify solutions to the cash flow problem. Most candidates were able to provide some solutions; however, these were often too general, incomplete or did not resolve the issue with the timing of cash flow. The required contained two components: FI's inability to pay its bills on time and the suggested personal loan. Most candidates focused their discussion on whether to take a personal loan and did not attempt to change the timing of the cash inflows or outflows. For example, many candidates addressed how risky it was to obtain a personal line of credit against the equity in Juan's home, and provided some other financing solution to replace it, such as a business loan or line of credit, but failed to propose ways to delay the bill payments or collect the fees earlier.

Strong candidates identified that the fees needed to be collected prior to the festival and provided relevant solutions, such as requiring a deposit from vendors. Strong candidates often integrated the SwiftPay implementation into their analysis, recognizing that this new technology would improve the cash flow situation as it provided for weekly direct deposits into its bank account, resulting in more timely receipt of vendor fees.

Weak candidates often only addressed the risk related to the personal line of credit and suggested getting a business line of credit instead. These candidates did not realize that obtaining a business line of credit, or a business loan, only provided a short-term solution and did not address the issue of timing as it related to FI operating a once-a-year festival. Some weak candidates recognized the cash flow issue but were not able to provide solutions to address the timing issue at hand. These candidates provided generic options for receiving money sooner from the vendors, such as proposing a discount for money submitted faster after the festival or deferring bill payments by asking for longer supplier terms. Because FI would still need to pay the bills before the vendor fees were collected, these solutions, although they would help reduce the delay between the outflows and the inflows, would not be enough on their own to completely close the gap.

# AO#4 (Compilation versus Review and Independence) (Assu)

Candidates were asked to discuss the difference between a compilation and a review engagement, recommend one and discuss whether they could perform the work. Candidates were provided with information relating to the users in the statement that "vendors have expressed interest in seeing FI's financial statements." To demonstrate competence, candidates had to discuss the difference between a compilation and a review engagement, recommend one and address the independence issue related to whether CPA could perform the work.

Candidates performed well on the discussion of the difference between a compilation and a review. This was a clearly directed request in the case. Candidates were able to provide an array of differences between a compilation and a review engagement, mostly discussing the level of assurance that each can provide and the type of work and fees specific to each, and used the information provided in the case to recommend an engagement based on the users' needs. However, most candidates did not recognize that there was an independence issue with CPA performing the work, as CPA was also providing advice to FI on other matters. More candidates than expected failed to discuss the independence issue at all. In addition, a surprising number of candidates thought it was acceptable for CPA to do the work.

Strong candidates explained in detail the difference between a compilation and a review, usually covering many concepts, such as the level of assurance, type of work, fees and users. They also addressed the independence issue and explained why their role as an advisor presented an independence issue (self-review, conflict of interest), and provided an example of the work that created the problem, often mentioning the advice on the accounting treatment of SwiftPay. Some strong candidates also addressed how the independence rules differ between a compilation and a review.

Weak candidates only addressed a few differences between a compilation and a review without going into depth, usually by providing a list of what would differ without further explanation, and their recommendation was often not linked to the users' needs. They mostly listed the level of assurance, the type of work and sometimes the fees.

# AO#5 (Business Risks Management) (Strat & Gov)

Candidates were asked to identify business risks and suggest a risk management approach for each. The information to help candidates identify the risks and support their analysis was spread throughout the case. To demonstrate competence, candidates had to identify some business risks, explain how each was relevant to FI and propose a risk management approach to mitigate each risk identified.

Candidates struggled on this AO. Although this was a very clearly directed AO, candidates had to piece the information together from their reading of the case to identify the business risks, as there was no specific appendix detailing the risks for FI. They also had to be creative in thinking of the nature of the risks that might exist with a summer festival. The risks most often addressed were related to the weather, the attraction of vendors, and the food and site safety, which were all hinted at in the case. Candidates who were able to identify some risks generally still struggled to provide a practical solution to mitigate those risks.

Strong candidates were able to identify several significant business risks. They explained how the risks affected FI and provided a valid approach to mitigate them. Many strong candidates integrated risks from other areas of the case, such as the risk related to the cash flow issue, the risk of the new technology (SwiftPay) failing, or the risk of vendors underreporting sales. Their recommendations also often integrated suggestions they had made in the rest of their response, such as a revised allocation of the recoverable costs, which should help retain vendors, or the SwiftPay technology, which would help solve the cash flow issues.

Weak candidates were usually unable to address more than one risk, and therefore their response lacked breadth. These candidates usually struggled to find relevant business risks, and focused instead on less relevant risks, such as the fact that there was no company accountant, suggesting that one should be hired. Some candidates also focused on financial risks, suggesting, for example, controls around the SwiftPay software. Although financial risks were considered valid risks, these candidates were unable to address other business risks and were therefore not able to provide sufficient risks that were relevant to the situation.

# AO#6 (SwiftPay Accounting Treatment) (Fin Rep)

Candidates were asked to provide advice on the accounting treatment for the costs incurred related to SwiftPay. Appendix II provided specific information on the different components of SwiftPay, including the \$65,000 paid to purchase 45 tablets, \$75,000 for a licence to use the software and \$5,000 in testing to tailor the software. To demonstrate competence, candidates were expected to provide a reasonable analysis of the accounting treatments for the different components, using Handbook guidance and case facts to support their discussions. Candidates were required to recognize the need to apply the guidance separately to the three components of SwiftPay, and use case facts to support their analysis of each.

Candidates performed as expected on this AO. Most candidates were able to provide an analysis on either the licence, tablets or testing fees, using the criteria from the relevant Handbook guidance, and provided case facts to support their analysis. Most candidates were able to identify the different components of SwiftPay, but many only addressed one of them in sufficient depth, often choosing to discuss the licence. Candidates were not expected to quote the Handbook guidance but those who did tended to provide a more complete analysis, as they addressed each of the criteria.

Strong candidates were able to identify that each component of SwiftPay, being the tablets, the licence, and testing, was different in nature and had to be analyzed with different Handbook sections, differentiating between intangible and PP&E assets. Using case facts, they provided a thorough analysis of these components, discussed the testing fees and explained how to amortize the different assets in the future.

Weak candidates often concluded on the accounting treatment without considering the Handbook criteria, or without applying case facts to their analysis. Most weak candidates did not recognize that there were different components to SwiftPay for which different accounting treatments applied. These candidates often treated all components of SwiftPay as one asset, usually as PP&E. As a result, they failed to identify the different treatments required.

# **AO#7 (Corporate Taxes Payable) (Tax)**

Candidates were asked to revise the estimate of corporate taxes payable prepared by Juan. Candidates were provided with Juan's estimate of corporate taxes payable in Appendix III. The Appendix notes included specific information about some of the expenses, and a mention of where Juan had found the tax rate he used in his calculation. Information required to calculate CCA for furniture and fixtures was found in the notes of Appendix III, as well as in Appendix II for the SwiftPay components. To demonstrate competence, candidates were expected to provide a reasonable calculation of corporate taxes payable, including some of the required adjustments to net income, such as CCA, depreciation, meals, fines and inventory, as well as explanations to support those adjustments. Candidates were also expected to identify that the rate used in the estimate was not reasonable, and to identify a more relevant rate to use.

Candidates were generally able to identify sufficient adjustments to Juan's calculation; however, they struggled to provide a correct tax treatment on the more complex adjustments. Most candidates were able to identify that the rate used was not appropriate for this company, but less than half of those did not provide an appropriate rate to use instead. Common adjustments made related to the meals and entertainment expense, picnic expense, depreciation and CCA for the furniture. However, many candidates made errors in one or more areas of their calculation, such as stating that fines are deductible, or made errors in applying the correct class and rate to the different assets. Many candidates failed to add back the SwiftPay costs, even though it was noted in the notes to the tax appendix that these costs had been expensed.

Strong candidates were able to address most of the adjustments and included technically correct explanations for them. They also demonstrated good technical knowledge in the calculation of CCA, correctly determining CCA classes and rates for the three asset groups and recognizing that the accelerated investment incentive would apply in 2019. These candidates also recognized that the tax rate of 38% provided in the case was too high, and proposed a lower tax rate. They explained why the company was eligible for a lower tax rate and provided analysis to support their tax rate choice.

Weak candidates' responses included only a few adjustments and often no explanations for these adjustments. Weak candidates usually only addressed the easier adjustments, such as the meals and the add back of the depreciation. When they addressed the more complex concepts, their analysis often included significant errors, which demonstrated their lack of technical knowledge, especially in the CCA calculation. In addition, some weak candidates stopped their calculation at taxable income and did not calculate taxes payable, or used the personal bracket to calculate taxes payable.

Paper/Simulation: Day 3, Case 3 (DD)

Estimated time to complete: 70 minutes

Simulation difficulty: Average

Competency Map coverage: Finance (1);

Management Accounting (1); Strategy and Governance (1);

Taxation (1); and Assurance (1)

### **Examiners' comments by Assessment Opportunity (AO)**

# AO#1 (Ratio Analysis) (Fin)

Candidates were provided with some industry benchmarks and asked to discuss how DD was performing relative to these ratios. The industry benchmarks were provided in Appendix II, and consisted of four different ratios (current ratio, inventory turnover, gross margin and debt ratio). Candidates were also given the 2019 internal financial statements in Appendix I. To demonstrate competence, candidates had to perform a reasonable comparison of DD's ratios to the industry benchmarks, interpret the results and explain what they meant for DD.

Candidates performed well on this AO. Most candidates correctly calculated the ratios for DD, using the 2019 information provided, and compared them with the industry benchmarks. Candidates generally also discussed the mechanics of each ratio and whether DD was meeting industry benchmarks and why. Candidates struggled the most with the inventory turnover ratio. Some had difficultly interpreting this ratio, incorrectly stating that, because the ratio was higher than industry, inventory was taking longer to sell. In addition, many candidates calculated the number of days in inventory and compared it to the industry benchmark provided, not realizing that the benchmark provided in Appendix II was the number of "times per year" the inventory was turning. Candidates also struggled to explain what the debt ratio meant to DD, incorrectly noting that it meant DD had less debt than its competitors, rather than understanding that it measured the percentage of assets that are financed by debt. Some candidates failed to link their interpretation of the ratios to DD. For example, many simply stated whether DD was meeting the industry benchmark but failed to provide specific reasons to support this, such as the high cost of locally sourced ingredients, which would impact gross margin, or the fact that DD uses only the freshest ingredients, which would impact inventory turnover.

Strong candidates were able to calculate most or all of the ratios correctly. These candidates also explained what each ratio meant or what it was intended to calculate. They also integrated case facts to explain whether DD was meeting industry benchmarks, for example, explaining that the debt ratio was low because DD was a pop-up operation, which demonstrated a good understanding of the case facts.

Weak candidates had calculation errors in some of their ratios, and often incorrectly interpreted the results, for example, stating that high inventory turnover was an indication of poor performance. These candidates provided general comments about the ratios calculated, such as addressing whether DD was performing better or worse than the industry, without using factors specific to DD that would help Danielle assess the situation. Therefore, these candidates were unable to interpret the results of the ratios in a way that would be useful to Danielle.

# AO#2 (Growth Options – Quant) (Mmgt Acct)

Candidates were asked to prepare a quantitative analysis of two expansion options: a new, permanent location or a booth in a Gogo Foods store. Financial information on the permanent location was provided in Appendix III and financial information for the Gogo option was presented in Appendix IV. In addition to the information provided in Appendices III and IV, candidates were expected to use DD's current financial information provided in Appendix I in order to prepare their analysis and compare the two options.

Candidates struggled with this AO. Although most candidates attempted a calculation of the two options, many failed to use a consistent approach, often calculating the incremental income that the permanent option would generate and comparing it with their calculation of what the new net income would be if the Gogo booth option was chosen. These candidates failed to recognize that their analysis needed to evaluate the two options on a comparable basis. Candidates also struggled to include elements in their calculation that were not provided directly in Appendices III and IV. For example, many candidates included the cost of goods sold in their calculation of the Gogo option, since the gross margin percentage was provided in Appendix IV, but did not take into account the cost of goods sold in the permanent location option, as that information was not provided in Appendix III.

Strong candidates demonstrated a clear understanding of how to approach the situation. They either calculated the incremental income, or the full net income, of each option. Either way, they approached the calculation in a consistent manner and therefore provided a valuable analysis that allowed Danielle to compare the two options. They also included sufficient elements in their calculation for the result to be meaningful to Danielle.

Weak candidates did not understand how to approach this calculation. Many included an incremental analysis for the permanent location and wrongly compared it to the net income of the Gogo booth option, without any adjustments for lost revenue or incremental savings. Other candidates' calculations included both incremental components and net income components within their analysis of one option, resulting in their individual calculation not being internally consistent. Some candidates used only the information from the appendices without considering Danielle's current operations, which did not provide a complete analysis of the options given.

# AO#3 (Growth Options – Qual) (Strat & Gov)

Candidates were asked to discuss how each of the expansion options analyzed in AO#2 fit with DD's goals and general direction. The main body of the case provided background information that was relevant to this analysis, including that Danielle's main objective was to grow her customer base while maintaining DD's objective of providing high quality, locally produced, vegan and gluten-free donuts and a unique experience for its customers. The case also stated that Danielle wanted to cater large events more often. Case facts specific to each of the options were provided in Appendix III (permanent location) and Appendix IV (Gogo's offer). To demonstrate competence, candidates had to discuss how the strategic decision factors of each of the options aligned with DD's goals and direction, and provide a recommendation.

Candidates performed well on this AO. Many candidates were able to draw on the information about DD's goals and general direction from the main body of the case and use it to analyze the two options with the case facts provided. Most candidates recognized that the permanent location would allow Danielle to continue to operate in a way that supported her goals and general direction, while the Gogo booth would not. Candidates most often discussed the fit of each option with Danielle's goal of growing the customer base, and the fit of the Gogo option with DD's objective to provide vegan and gluten-free donuts and use high-quality ingredients. Candidates were more comfortable explaining why the Gogo option did not meet DD's goals and direction than explaining why the permanent location option was better suited.

Strong candidates analyzed both options, supported their analysis with a number of case facts and described whether these case facts supported DD's goals and direction. For example, they discussed not only Danielle's objective to grow her customer base but also whether each option would support her other goals, such as providing high quality donuts made with vegan and gluten-free ingredients or providing a unique experience for her customers. Strong candidates provided a recommendation that was consistent with their analysis.

Weak candidates often tried to link the information given in the appendices about the two options to quantitative factors, such as growing revenues or increasing costs. These discussions were a repetition of what had already been addressed in their quantitative analysis in AO#2. For example, some candidates mentioned that, if the target level of sales is met, Gogo might install a booth in each of its locations across Canada, and they commented that this would increase the sales. While not incorrect, a better response would have put the focus on the fact that this would satisfy Danielle's goal to increase the customer base. Other weak candidates merely stated case facts and added whether they would align with DD's goals, without being specific as to which goal they were referring to, or why or why not that goal would be met using case facts.

# **AO#4 (Personal Taxes Payable) (Tax)**

Candidates were asked to calculate Danielle's federal taxes payable for 2019. Information relevant to Danielle's current tax situation was provided in Appendix V. Candidates were also expected to pull Danielle's salary from note 4 of Appendix I. Finally, the reference schedule at the end of the exam booklet contained the federal income tax rate table that candidates should have used to calculate Danielle's taxes payable. To demonstrate competence, candidates were expected to calculate her taxes payable by incorporating the various additions and deductions noted in the Appendix, considering the credits that were applicable to her situation, and using a reasonable rate.

Candidates performed adequately on this AO. Most candidates were able to calculate federal taxes payable by incorporating a sufficient number of adjustments, most frequently addressing the dividend gross up and interest and broker fees, and recognizing that personal credits are included at 15%. Almost half of the candidates recognized that taxes withheld had to be removed from the total owing. However, although most candidates recognized the need to adjust for some elements presented in the case, they were sometimes unable to adequately address the tax concepts. For example, most candidates identified that the RRSP contributions made from March to December 2019 were deductible in 2019, but many of them did not recognize that the monthly contributions made in the first two months of 2020 were also deductible in 2019. Many candidates also started with Danielle's business income, forgetting that DD is a private corporation, as noted on page 1 of the case, and therefore the business income would not be included in Danielle's personal tax calculation. Candidates also struggled with how to apply marginal tax rates adequately, often stating that there were no taxes calculated on the first tax bracket, or applying a blanket rate to the entire balance of taxes payable.

Strong candidates were able to demonstrate an understanding of how certain personal tax concepts are treated, such as the fact that dividends are grossed up, broker fees can be deducted from investment income and childcare expenses can be deducted from the lower income earner. Strong candidates clearly understood how the graduated rates worked and provided a reasonable taxes payable calculation. Many strong candidates were also able to demonstrate their understanding of personal tax credits.

Weak candidates often made very few correct adjustments to the revenue and expenses provided in the case. The most common errors found in responses related to candidates' misunderstanding of how personal tax is calculated or how personal tax credits are applied. Many candidates deducted tax credits such as the basic exemption and donations from Danielle's taxable income, instead of from her taxes payable. In addition, they struggled to show a good understanding of how the graduated tax rates work.

# AO#5 (Audit Procedures Balance Sheet) (Assur)

Candidates were asked to provide audit procedures that would be performed by the auditors on DD's 2019 balance sheet and to address why these procedures would be performed. This required was found in Appendix III of the case rather than on the first page. The balance sheet was given in Appendix I, which provided the candidates with many possible accounts for which they could provide procedures. To demonstrate competence, candidates were expected to provide some procedures over the balance sheet accounts and explain the purpose of the procedures.

Candidates struggled a bit on this AO. Most candidates were able to provide sufficient procedures but struggled to explain why the procedure would be performed. They were most successful at providing clear and relevant procedures when addressing accounts receivable, property, plant and equipment and cash. They were comfortable with the basic procedures, such as sending confirmations and performing a physical inspection of property, plant and equipment. However, candidates struggled to provide relevant procedures for the inventory balance, since most candidates suggested that an inventory count be performed without realizing that it was after year end and therefore an inventory count could only be performed if rollback procedures were also performed. A surprising number of candidates failed to explain why the procedure would be performed, which was a direct required from the case.

Strong candidates were able to suggest procedures that were specific, complete and clear as to their purpose. They were able to identify many relevant procedures that would be performed on DD's balance sheet, and explained why they would be performed. They were also able to provide greater breadth of analysis by covering most of the balance sheet accounts. These candidates often provided procedures on the liabilities as well as assets, addressing the risk related to the accounts payable and the long-term debt more often than the average candidate.

Weak candidates provided fewer procedures over the balance sheet or only provided procedures over the income statement, although the required was clearly asking for procedures on the balance sheet accounts. These candidates often suggested procedures that were incomplete, vague, not useful in assessing the underlying risk or very general. Many weak candidates also failed to incorporate the specific information provided in the case into their procedures, for example, suggesting that an inventory count would be performed.

# **APPENDIX G**

**CPA COMMON FINAL EXAMINATION REFERENCE SCHEDULE** 

# **CPA COMMON FINAL EXAMINATION REFERENCE SCHEDULE**

# 1. PRESENT VALUE OF TAX SHIELD FOR AMORTIZABLE ASSETS

Present value of total tax shield from CCA for a new asset acquired before November 21, 2018

$$= \frac{CTd}{(d+k)} \left( \frac{2+k}{2(1+k)} \right) = \frac{CdT}{(d+k)} \left( \frac{1+0.5k}{1+k} \right)$$

Present value of total tax shield from CCA for a new asset acquired after November 20, 2018

$$=\frac{CdT}{(d+k)}\left(\frac{1+1.5k}{1+k}\right)$$

### Notation for above formula:

*C* = net initial investment

T =corporate tax rate

k = discount rate or time value of money

d = maximum rate of capital cost allowance

# 2. SELECTED PRESCRIBED AUTOMOBILE AMOUNTS

	2019	2020
Maximum depreciable cost — Class 10.1	\$30,000 + sales tax	\$30,000 + sales tax
Maximum depreciable cost — Class 54	\$55,000 + sales tax	\$55,000 + sales tax
Maximum monthly deductible lease cost	\$800 + sales tax	\$800 + sales tax
Maximum monthly deductible interest cost	\$300	\$300
Operating cost benefit — employee	28¢ per km of personal	28¢ per km of personal
	use	use
Non-taxable automobile allowance rates		
<ul><li>first 5,000 kilometres</li></ul>	58¢ per km	59¢ per km
- balance	52¢ per km	53¢ per km

# 3. INDIVIDUAL FEDERAL INCOME TAX RATES

# For 2019

If taxa	able inc	<u>ome is between</u>	Tax on base amount	Tax on excess
\$0	and	\$47,630	\$0	15%
\$47,631	and	\$95,259	\$7,145	20.5%
\$95,260	and	\$147,667	\$16,908	26%
\$147,668	and	\$210,371	\$30,534	29%
\$210,372	and	anv amount	\$48,718	33%

# For 2020

If taxa	able inc	ome is between	Tax on base amount	Tax on excess
\$0	and	\$48,535	<b>\$</b> 0	15%
\$48,536	and	\$97,069	\$7,280	20.5%
\$97,070	and	\$150,473	\$17,230	26%
\$150,474	and	\$214,368	\$31,115	29%
\$214,369	and	any amount	\$49,644	33%

# 4. SELECTED INDEXED AMOUNTS FOR PURPOSES OF COMPUTING INCOME TAX

Personal tax credits are a maximum of 15% of the following amounts:

	2019	2020
Basic personal amount	\$12,069	\$12,298
Spouse, common-law partner, or eligible dependant amount	12,069	12,298
Age amount if 65 or over in the year	7,494	7,637
Net income threshold for age amount	37,790	38,508
Canada employment amount	1,222	1,245
Disability amount	8,416	8,576
Canada caregiver amount for children under age 18	2,230	2,273
Canada caregiver amount for other infirm dependants age 18 or older (maximum amount)	7,140	7,276
Net income threshold for Canada caregiver amount	16,766	17,085
Adoption expense credit limit	16,255	16,563

# Other indexed amounts are as follows:

	2019	2020
Medical expense tax credit — 3% of net income ceiling	\$2,352	\$2,397
Annual TFSA dollar limit	6,000	6,000
RRSP dollar limit	26,500	27,230
Lifetime capital gains exemption on qualified small business	866,912	883,384
corporation shares		

# 5. PRESCRIBED INTEREST RATES (base rates)

<u>Year</u>	<u>Jan. 1 – Mar. 31</u>	<u> Apr. 1 – June 30</u>	<u>July 1 – Sep. 30</u>	Oct. 1 – Dec. 31
2020	2	2		
2019	2	2	2	2
2018	1	2	2	2

This is the rate used for taxable benefits for employees and shareholders, low-interest loans, and other related-party transactions. The rate is 4 percentage points higher for late or deficient income tax payments and unremitted withholdings. The rate is 2 percentage points higher for tax refunds to taxpayers, with the exception of corporations, for which the base rate is used.

# 6. MAXIMUM CAPITAL COST ALLOWANCE RATES FOR SELECTED CLASSES

Class 1	4% for all buildings except those below
Class 1	6% for buildings acquired for first use after
	March 18, 2007 and $\geq$ 90% of the square
	footage is used for non-residential activities
Class 1	10% for buildings acquired for first use after
	March 18, 2007 and $\geq$ 90% of the square
	footage is used for manufacturing and
	processing activities
Class 8	20%
Class 10	30%
Class 10.1	30%
Class 12	100%
Class 13	Original lease period plus one renewal period (minimum
	Original lease period plus one renewal period (minimum 5 years and maximum 40 years)
Class 13	5 years and maximum 40 years)
Class 14	5 years and maximum 40 years) Length of life of property
Class 14	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016
Class 14	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8%
Class 14	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8% 50% Straight-line
Class 13	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8% 50% Straight-line 30%
Class 13	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8% 50% Straight-line 30% 25%
Class 13	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8% 50% Straight-line 30% 25% 45%
Class 13	5 years and maximum 40 years) Length of life of property 5% For property acquired after December 31, 2016 8% 50% Straight-line 30% 25% 45% 55%

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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