



# Densmore

## **CPA COMPETENCY MAP STUDY NOTES SAMPLE EXCERPTS**

**2023 Edition**

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### STATEMENT OF CASH FLOWS

Statement of cash flows is at Level A for both Core Module 1 (Financial Accounting and Reporting) and the Assurance elective.

#### References:

IFRS standards: IAS 7, Statement of Cash Flows

ASPE: HB 1540, Cash Flow Statement

The statement of cash flows is a required part of F/S. It reports the change in cash and cash equivalents – cash, short-term investments (maturity of three months or less, readily convertible to known quantity of cash, excludes equity investments) and bank overdrafts.

Classify transactions as operating, investing and financing

- *Operating Activities* – principal revenue-producing and service provision activities of the entity and all other activities that are not investing or financing activities. Cash flows from operating activities can be shown using either the direct or indirect method (direct method is encouraged, but not required, felt to provide more useful information to users).
  - Direct – basically recasts I/S to cash flow basis (e.g., cash received from customers, cash paid to suppliers and employees, income taxes paid, etc.)
  - Indirect – most commonly used – starts with net income from the I/S and reconciles to cash flow basis (e.g., add back non-cash items such as depreciation, adjust for changes for working capital accounts such as accounts receivable)
- *Investing Activities*
  - Acquisition and disposal of long-term assets
  - For disposals, use proceeds of disposal (rather than book gain/loss)
- *Financing Activities*
  - Changes re long-term debt (e.g., new borrowings, repayments) and equity (e.g., issuance or retirement of shares, dividends)

**STATEMENT OF CASH FLOWS (cont'd)**

Statement of Cash Flows Template – Indirect Method

This template includes the most common items you will see in a statement of cash flows, prepared using the indirect method.

Sources of cash are shown as additions. Uses of cash are shown as deductions (in brackets).

**WOLFE INC.**  
**Statement of Cash Flows**  
For the year ended December 31, 20X1

Cash flow from operations	
Net income	\$ xxx
Adjust for non-cash items	
Depreciation / amortization (add back to remove effect from NI)	xxx
Loss on disposal of assets (add back to remove effect from NI)	xxx
Gain on disposal of assets (deduct to remove effect from NI)	(xxx)
Adjust for changes in non-cash working capital items	
Decreases in current assets	xxx
Increases in current assets	(xxx)
Decreases in current liabilities	(xxx)
Increases in current liabilities	xxx
	xxx
Cash flow from investing	
Purchase of long-term assets (Note 1)	(xxx)
Proceeds on sale of long-term assets (Note 1)	xxx
	xxx
Cash flow from financing	
New long-term debt proceeds	xxx
Repayment of long-term debt (principal portion only)	(xxx)
Issue of capital stock	xxx
Repurchase of capital stock (use cash flow amount)	(xxx)
Payment of dividends (Note 2)	(xxx)
	xxx
Increase in cash (subtotal of cash flow from operations, investing and financing)	xxx
Cash, beginning of year (per prior year's balance sheet)	xxx
Cash, end of year (per current year's balance sheet)	\$ xxx

**STATEMENT OF CASH FLOWS (cont'd)**

Statement of Cash Flows Template – Indirect Method (cont'd)

**Note 1** – Capital asset transactions – Sometimes, you may only be provided with some of the data. You can use t-accounts to fill in what you know and then you will be able to plug in the unknowns.

Capital Assets		
xxx		beginning balance
xxx		addition
	xxx	disposal (at cost amount)
xxx		ending balance
Accum. Depreciation		
	xxx	beginning balance
	xxx	depreciation exp
xxx		disposal (at accumulated depreciation amount)
	xxx	ending balance

Proceeds (cash flow)		xxx
Less net book value		
Cost	xxx	
Accumulated depreciation	(xxx)	(xxx)
Gain/ loss on disposal		xxx

Or you may prefer to think of the calculation of gain / loss on disposal of a capital asset in terms of a journal entry. You will sometimes only know three of the variables and will have to plug in the fourth item (such as cash proceeds might be missing or maybe you have the cash number, but you need to calculate the gain/loss on disposal):

Cash (proceeds)		xxx
Accum depreciation (to clear the accumulated depreciation re disposed asset out of the account)		xxx
Capital asset (to clear the cost out of the asset account)		xxx
Gain on disposal (it will be a debit if it is a loss)		xxx

**STATEMENT OF CASH FLOWS (cont'd)**

Statement of Cash Flows Template – Indirect Method (cont'd)

**Note 2** – Payment of dividends – Sometimes, you may not be provided with the dividends number. You can use t-accounts to fill in what you know and then you will be able to figure out the dividends paid amount. The first calculation gives you the amount of dividends declared. Then if you have a dividends payable account on your balance sheet, you will need to do a second calculation to figure out the amount of dividends paid.

Retained Earnings	
	xxx beginning balance
	xxx net income
xxx	stock dividend (non-cash transaction, so it will not show up on the statement of cash flows)
xxx	cash dividends declared (plug)
	xxx ending balance

Cash dividends declared (per above)	xxx
Decrease (increase) in dividends payable	xxx
Cash dividends paid	xxx

### STATEMENT OF CASH FLOWS (cont'd)

#### Statement of Cash Flows Template – Direct Method

This template includes the most common items you will see in a statement of cash flows, prepared using the direct method. The investing and financing sections of the statement of cash flows are exactly the same whether you use the indirect or direct method. The only area that is different is the cash flow from operations section.

Sources of cash are shown as additions. Uses of cash are shown as deductions (in brackets).

#### Cash flow from operations – Direct

Cash collected from customers		
Sales	xxx	
Bad debt expense	(xxx)	
Decrease (increase) in net accounts receivable	xxx	
Increase (decrease) in unearned revenue	<u>xxx</u>	\$ xxx
Cash paid for inventory and operating expenses		
Cost of goods sold	(xxx)	
Operating expenses	(xxx)	
Decrease (increase) in inventory	xxx	
Decrease (increase) in prepaid expenses	xxx	
Increase (decrease) in accounts payable	<u>xxx</u>	(xxx)
Cash paid on interest		
Interest expense	(xxx)	
Increase (decrease) in interest payable	<u>xxx</u>	(xxx)
Cash paid on taxes		
Income tax expense	(xxx)	
Increase (decrease) in income tax payable	<u>xxx</u>	<u>(xxx)</u>
		<u>\$ xxx</u>

- 
- Cash flows from the following may be reported on a net basis:
    - Cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the entity. Examples:
      - Acceptance and repayment of demand deposits of a bank
      - Funds held for customers by an investment entity
      - Rents collected on behalf of, and paid over to, the owners of properties
    - Cash receipts and payments for items in which the turnover is quick, the amounts are large and the maturities are short. Examples:
      - Principal amounts relating to credit card customers
      - Purchase and sale of investments
      - Other short-term borrowings (e.g., those which have a maturity period of three months or less)

## CFE Testing (cont'd)

### *Common CFE Testing Scenarios (cont'd):*

- Corporate governance
  - Identify weaknesses related to corporate governance using case facts to support your analysis
  - State why it is a weakness (e.g., explanation of the reason an improvement was needed)
  - Recommend change to be made to overcome the weakness, considering nature / size of organization.
  - Factors to consider:
    - Board composition – majority independent
    - Board members' experience, competency and skills – both individually and for the Board as a whole
    - Board members selection process
    - Terms for Board members
    - Use of Board committees
    - Ongoing training needed for Board
    - Independence issues and / or conflicts of interest
    - Functioning of Board
    - Frequency and / or location of Board meetings

**BUDGETING (cont'd)**

*Standard Cost Systems*

- *Standard* – benchmark or norm for measuring performance. Typically, standards are set for direct materials, direct labour and overhead.
- *Quantity Standards* – specify how much of a cost element (e.g., how many grams of direct material or how many hours of direct labour)
- *Cost Standards* – specify what the cost (\$) should be
  
- *Establishing Standards*
  - Ideal standards (attainable only under the best circumstances) versus practical standards (tight but attainable). Practical is more realistic – useful for motivational purposes.
  - Use historical data as starting point (but need to be careful that standards do not reflect inefficient past operations) and factor in future expectations.
  - Direct Materials
    - Standard price per unit – final, delivered cost of the materials for a specified grade, net of any discounts taken
    - Standard quantity per unit – amount of material going into each unit of finished product, considering unavoidable waste, spoilage, etc.
  - Direct Labour
    - Standard rate per hour – hourly wage rate, including benefits and any other costs related to direct labour
    - Standard hours per unit – amount of time to complete each unit of finished product, considering unavoidable time re breaks, cleanup, machine downtime, spoilage, etc.
  - Manufacturing Overhead (MOH)
    - Predetermined overhead rate = estimated MOH / estimated activity
    - Estimated MOH = expected MOH costs for the year
    - Estimated activity – measured as machine hours, direct labour hours or some other appropriate base
    - As actual MOH costs are incurred, they are debited to a clearing account called Manufacturing Overhead
    - Overhead is applied to Work in Process Inventory account on a periodic basis by means of the predetermined overhead rate
 

Work in Process Inventory	xxx
Manufacturing Overhead	xxx

The work in process inventory account also includes direct materials and direct labour. Eventually, the work in process inventory works its way through to finished goods inventory and ultimately to cost of goods sold.
    - Underapplied or overapplied overhead – difference between actual MOH incurred and MOH applied using the predetermined overhead rate – equal to the balance in the MOH account. How to dispose of underapplied or overapplied overhead at the end of the period?
      - Close out to COGS
      - Allocate between work in process inventory, finished goods inventory and COGS, based on relative proportion in each of these accounts
      - Carry forward to the next period



### BUDGETING (cont'd)

*Example of calculating predetermined overhead rate:*

Budgeted variable overhead (VOH)	\$40,000
Budgeted fixed overhead (FOH)	\$25,000
Budgeted machine hours	2,000
Budgeted direct labour	\$100,000

Assuming machine hours is the relevant cost driver, compute the variable and fixed pre-determined overhead rates.

Assuming direct labour is the relevant cost driver, compute the variable and fixed pre-determined overhead rates.

*Solution:*

Assuming machine hours is the relevant cost driver:

Pre-determined variable overhead =  $\$40,000 / 2,000 = \$20$  per machine hour

Pre-determined fixed overhead =  $\$25,000 / 2,000 = \$12.50$  per machine hour

Assuming direct labour is the relevant cost driver:

Pre-determined variable overhead =  $\$40,000 / \$100,000 = 40\%$  of direct labour cost

Pre-determined fixed overhead =  $\$25,000 / \$100,000 = 25\%$  of direct labour cost

(The number of standard machine or standard direct labour hours per unit is then multiplied to the above rates to determine standard variable and standard fixed overhead costs per unit, which in turn are included in determining total standard cost per unit.)

**BUDGETING (cont'd)**

*Analysis of Variance with a Standard Cost System*

- *Variance* – difference between standard (or budgeted) quantities and prices and actual quantities and prices. It is comprised of a price variance and a quantity variance.
- *Abbreviations Used in Variance Formulas*

AQ = Actual Quantity/Hours	SQ = Standard Quantity/Hours
AP = Actual Price/Rate	SP = Standard Price/Rate
- *Price Variance = AQ (AP – SP)*
- *Efficiency Variance = SP (AQ – SQ)*

Direct Material (DM) Variances

- *Direct Materials Price Variance = AQ (AP – SP)*
  - Usually responsibility of purchasing agent who has control over price paid for goods
  - Factors to consider – volume purchased, quantity discounts available, rush orders, quality of materials purchased
- *Direct Materials Efficiency Variance = SP (AQ - SQ)*
  - Usually responsibility of production department, but may be responsibility of purchasing agent if inferior product has been purchased
  - Factors to consider – faulty machines, inferior quality of materials, poorly trained workers, poor supervision of employees
- Direct Materials Efficiency Variance can be broken down further into:
  - *Direct Materials Mix Variance*

(Actual DM input mix % – budgeted DM input mix %) x actual total quantity of all DM inputs used x budgeted price of DM input
  - *Direct Materials Yield Variance*

(Actual total quantity of all DM inputs used – budgeted total quantity of all DM inputs allowed for actual output achieved) x budgeted DM input mix % x budgeted price of DM input

**MATERIALITY IN PLANNING AND PERFORMING AN AUDIT**

**CAS 320**

CAS 320 is at Level A for both Core Module 1 (Financial Accounting and Reporting) and for the Assurance elective.

Materiality

- Misstatements including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of the F/S
- Judgments about materiality are made in light of surrounding circumstances and are affected by the size or nature of a misstatement or a combination of both
- Judgments about matters that are material to users of the F/S are based on a consideration of the common financial information needs of users as a group. The possible effect of misstatements on specific individual users, whose needs may vary widely, is not considered.

Materiality for F/S as a whole – When establishing the overall audit strategy, determine materiality for the F/S as a whole

- Qualitative factors:
  - Users, particularly if there are new users
  - Whether there are items on which the attention of the users of the F/S tend to be focused.
  - The nature of the entity, where the entity is in its life cycle and the industry and economic environment in which the entity operates
  - The entity’s ownership structure and the way it is financed (e.g., if financed by debt, users may put more emphasis on assets and liabilities rather than net income)
  - Relative volatility of the quantitative benchmark chosen
- Quantitative guidelines
  - Materiality is a matter of professional judgment. Most of the quantitative guidelines previously provided in Canadian GAAS have been removed from the Handbook.
  - Following are examples:
    - For profit-oriented entities, 5% of profit before tax from continuing operations. If this is not an appropriate base, consider ½ - 1% of assets or revenue or ½ - 5% of gross profit.
    - Non-profit organization – 1% of total revenue or expenses
    - For owner-managed business with a tax minimization strategy, 5% of net income before remuneration and tax may be more appropriate

Materiality for classes of transactions, account balances, disclosures

- If applicable, a lower materiality may be required for particular classes of transactions, account balances or disclosures based on influence on economic decisions of users

**MATERIALITY IN PLANNING AND PERFORMING  
AN AUDIT (cont'd)**

**CAS 320**

Performance materiality

- Used for purposes of assessing the risks of material misstatement and determining the nature, timing and extent of further audit procedures.
- It is the amount set by the auditor at less than materiality for the F/S as a whole to reduce to an appropriately low level, the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the F/S as a whole.
- It is set as a percentage of overall materiality. The percentage used is based on professional judgment (e.g., performance materiality could be set as 75% of overall materiality; usually set between 50% to 90% of overall materiality, but because it is based on professional judgment, it could be lower or higher.)

Revisions as the audit progresses

- Revise materiality for F/S as a whole if become aware of information during the audit that would have caused the auditor to have determined a different amount initially.
- May also need to revise performance materiality, in which case auditor needs to assess whether the nature, timing and extent of the further audit procedures remain appropriate.

## ASSET-BASED FINANCING

### *Lease Financing*

- Direct Lease
  - A contractual arrangement whereby the lessor (owner of asset) allows the lessor to use the asset for a specific period of time in return for periodic payments.
  - Can classify as either: 1) capital (finance) or 2) operating leases (for a discussion of the financial accounting treatment, see financial reporting competency area).
  - Depending on the conditions of the contract and term length (and irrespective of the accounting treatment), a lease or sale and leaseback transaction (see below) might be treated as debt financing for capital structure and weighted average cost of capital purposes.
  
- Sale and Leaseback
  - A contractual arrangement whereby a company sells an asset (e.g., real estate, equipment) it already owns and then leases that same asset back from the purchaser (usually for the long-term) at an agreed rate.
  - In essence, this is a loan with the lease payments being a proxy for interest payments.
  - These arrangements provide the company with an immediate cash flow (and therefore, a quick and easy source of financing) to expand business operations or pay down other debt while allowing the company continued use of the asset.

### *Lease versus Purchase Analysis*

- Qualitative considerations:
  - Financial statement presentation – If meets the criteria of an operating lease, will be off-balance sheet financing and if meets the criteria of a capital lease, will need to record asset and corresponding liability on balance sheet. Impact on users of F/S? Impact on existing debt covenants? Impact on ability to obtain additional debt financing?
  - If purchase asset, may be more flexible – sell asset if no longer needed? However, purchasing entails taking on obsolescence risk. That is not the case with a lease – the lessee simply returns the asset to the lessor at the end of the lease.
  - Leasing option may be the only available option in situations where the company has insufficient cash flow for purchase (to purchase outright or to provide the down payment required to purchase) or company is unable to obtain financing to purchase asset.
  - Provisions of lease agreement may be less restrictive than those associated with debt financing (e.g., former can be tailored to meet the needs of both parties; former usually has no covenants restricting financial flexibility).

**ASSET-BASED FINANCING (cont'd)***Lease versus Purchase Analysis (cont'd)*

- Quantitative analysis (including relevant cash flows and discount rate):
  - Calculate net present value of each option and compare them to determine which is least costly.
  - Discount rate used for both alternatives should be the after tax cost of debt (rather than the cost of capital rate used for capital budgeting decisions) because there is greater certainty (and therefore, less risk) associated with the cash flows in the lease versus purchase scenario.
  - Net present value of purchase/borrow alternative  
= Cost of asset – PV of Tax Shield (formula provided under capital budgeting)
  - Net present value of lease alternative (assumed operating lease for tax purposes)  
= After Tax Lease Payments x Discount Rate
  - May be able to use annuity factor if lease payments are constant. If lease payments fluctuate, will need to apply the lump sum present value factors to each year and add up the discounted cash flows for all the years. For exam purposes, make sure to read carefully to determine if cash flows are assumed to occur at the beginning or the end of the year as it will impact the annuity factor used.

*Example of purchase versus lease calculations:*

An asset could be purchased for a total cost of \$50,000 or could be leased for five years for an annual lease payment of \$10,000 with payments required at the beginning of the year. The relevant income tax rate is 30%, the relevant discount rate is 6%, and the PV of the tax shield has been calculated at \$12,000. Determine the cost of both options.

Purchase option:            \$50,000 cost – \$12,000 tax shield = \$38,000

Lease option:

BGN

N = 5

I/Y = 6%

PMT = \$7,000 (\$10,000 lease payment – 30% tax)

Compute PV = \$31,256

**On a quantitative basis, the lease option is cheaper by \$6,744 but also need to consider qualitative factors in the decision.**

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## CORPORATION'S INCOME TAX PROFILE

### *Corporate types*

- Private corporation
  - resident in Canada, but not a public corporation or controlled by a public corporation
- Canadian-controlled private corporation (CCPC)
  - private corporation controlled by persons resident in Canada
- Public corporation
  - at least one class of its shares is listed on a designated stock exchange in Canada

### *Corporate residency*

- Resident corporations subject to tax on *worldwide* income
  - non-resident corporations taxable on *Canadian-source* income
- Deemed to be resident if:
  - incorporated in Canada after April 26, 1965;
  - incorporated before this time and carried on business in Canada at any time thereafter; or
  - considered resident by common law principles
- Common law principles of “mind and management” or “central management and control”
  - location of board of directors
  - place of decision-making

### *Basic stakeholder relationships*

- Affiliated persons
  - an individual and spouse of the individual
  - a corporation and
    - 1) a person who controls the corporation
    - 2) each member of an “affiliated group of persons” who control the corporation
    - 3) a spouse of the person described in 1 and 2
- Affiliated group of persons
  - a group of persons, each member of which is affiliated with every other member
- Affiliated corporations
  - two corporations are affiliated if:
    - each corporation is controlled by a person, and the person by whom one corporation is controlled is affiliated with the person by whom the other corporation is controlled
    - one corporation is controlled by a person, the other corporation is controlled by a group of persons, and each member of that group is affiliated with at least one member of the other group

**CORPORATION'S INCOME TAX PROFILE (cont'd)**

- Associated corporations
  - association rules are designed to avoid abuse of the \$500,000 annual business limit for the small business deduction (SBD) because the limit must be shared among associated corporations
  - the rules are complex, but the most likely situations that will be encountered in case-based testing scenarios include:
    - one company controls the other directly or indirectly in any manner whatever
    - both companies are controlled by the same person or group of persons
    - each corporation is controlled directly or indirectly in any manner whatever by one person (say, Mr. A and Mrs. A), the persons controlling each corporation are related, and one person owns at least 25% of the shares of both corporations
  
- Connected corporations
  - a corporation is connected with another corporation if:
    - the corporation is controlled by the other corporation; or
    - the corporation's shares are held by the other corporation and these shares represent >10% of the votes and FMV of all the issued shares in the corporation
  
- Non-arm's length and related persons
  - related persons are deemed not to deal with each other at arm's length
  - individuals are related if they are connected by blood relationship, marriage, common-law partnership or adoption
  - corporate relationship rules are complex, but in case-based testing scenarios, remember that
    - a corporation is related to the person who controls it
    - two corporations are related if they are both controlled by the same person



**SYSTEMS LIFE CYCLE (cont'd)**

*Implementation* – process of installing a system and making it operational

- Implementation plan – document that is approved by implementing management and user management. It should include:
  - Activities required to implement the system
    - Equipment acquisition and installation
    - Site preparation
    - Final system acceptance criteria
    - Final user training
    - Installation of any necessary operating software changes
    - Implementation of operating procedures
    - Conversion
  - Sequence of events, resource needs, dependencies, fallback and recovery steps, conversion steps and verification steps.
  - Monitor actual progress against plan
- Testing – information systems should be adequately tested prior to implementation:
  - Unit testing – verification by developers that individual modules of the system function as designed
  - System testing – verification by developers that the individual modules of the system function as designed when integrated with one another, including interfaces with other systems
  - User acceptance testing – verification by system users that the system meets their needs and operates reliably
- Operating documentation
- User procedures and training
  - Detailed user procedures documented
  - User training
- Conversion plan should include:
  - Tests to compare original data with converted data (in total and in detail)
  - Tests to check the compatibility of the original data with the new system
  - Comparison of converted critical files to original data to ensure complete and accurate
  - Adequate segregation of duties and security during conversion to ensure integrity of data and programs maintained
  - Testing of converted master files to original data to ensure complete and accurate
  - Ensure transactions affecting master files during the conversion period are updated to both the original and converted master files
- *Post Implementation Review* – determine if project has succeeded and also as a basis for learning and improving future performance
  - Were the objectives realized?
  - Were expected savings realized?
  - Was the project completed on time and within budget?