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Construction Contractors: Accounting and Auditing

Construction Contractors: Accounting and Auditing

Module	Title
1	Nature of the Construction Industry
2	Contract Accounting and Lease Accounting and Their Impact on Construction Contractors
3	Construction Cost Allocations
4	Financial Statements for the Construction Contractor
5	Construction Contractors – Working With a Surety
6	Audit Risks of a Construction Contractor

Construction Contractors: Auditing Considerations

Module	Title
7	Audit Planning and Risk Assessment Procedures
8	Substantive Auditing Procedures for Auditors of Construction Contractors
9	Internal Controls for the Construction Contractor

Disclaimer

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Nature of the Construction Industry

Learning objectives

- Recall the predominant types of construction contractors and the work they typically perform.
- Identify the common significant steps within the overall construction process.
- Recognize select characteristics that are unique to the construction industry and that have accounting, audit, tax, or consulting consequences.

Polling question

- Who here works for a CPA firm, doing work for construction contractors?
- Who works for a contractor?

Class activity

- Turn to your neighbor and make a list of a few things that you would like to learn today.
- Describe what makes the construction industry different from other types of businesses.

Size of the construction industry

- The construction industry has a large impact on the economy.
- In the U.S. economy, construction is
  - 3rd largest contributor to GDP.
  - 6th Largest employer.

Types of contractors

- Design-build
  - — "Turnkey" contractor
- Heavy construction
  - — Roads, bridges, dams, airports
- General contractors
  - — Contractor who enters into a contract with the owner and who takes full responsibility for its completion
- Subcontractors
  - — Contractor who enters into a contract with the general contractor to perform a specific part or phase of a project
- Construction manager
  - — Enters into an agency contract with the owner to supervise and coordinate the construction activity

Construction industry is unique…

Players in the industry

- Variety of project owner(s)
- Other contractors and subcontractors
- Architect & engineer
- Bonding agent and surety
- Lawyers, bankers, CPAs

Construction industry is unique… (continued)

Players inside the company

- Variety of owner(s)
- CFO, controller, bookkeeper
- Estimator(s)
- Project manager(s)
- Labor force
  - Employees
  - Union
  - Independent contractors

Construction process

- Prepare cost estimates and bids
  — Preparing a cost estimate for a construction project is similar to estimating the cost of an audit.
- Enter into the contract
  — A CPA and an audit client sign an engagement letter; a contractor and an owner sign a contract.
- Start the job
  — To start an audit, the CPA has to mobilize the staff, supplies, and any necessary equipment. Before construction begins, the contractor usually moves equipment to the job site, erects a temporary field office, and installs temporary utilities.
- Manage the project
  — A CPA has an audit senior/manager to perform this function; a contractor has a project manager.

Factors a contractor evaluates when determining markup

- Complexity of job
- Volatility of labor & materials
- Contractor’s experience
- Season & weather
- Relationship with owner
- Competition and market
- Incentives & penalties
- Cash flow
- Unique risks to the project (warranty)

Characteristics unique to contractors

What makes a contractor unique?	What it means to the CPA?
Contract projects are one-of-a-kind – the contractor does not do the same job twice.	The contractor's business is more project-oriented and less process-oriented. Unique projects increase audit risk.
Contractor usually sets a price for the work before the work is done.	A contractor must have good estimating skills. Extensive use of estimates creates accounting, auditing, and tax issues.
Construction work is performed under contract.	The risk assumed by the contractor varies according to the type of contract entered into. The requirements of the internal control structure may vary according to the type of contract. The accounting and auditing of a contractor is essentially the accounting and auditing of individual contracts.
Construction projects may take a long time to complete.	When the start and completion of a contract stretches over more than one accounting period, revenue, and taxable income are based on estimates. Generally, the longer the project, the greater the risk.

Characteristics unique to contractors (continued)

What makes a contractor unique?	What it means to the CPA?
Change orders occur frequently.	Change orders, claims, extras, and back charges will affect the profitability of the job. They must be properly controlled and accounted for. Documentation is a must.
Most contractors need a surety company and bonding in order to operate.	A surety company is an integral part of the contractor's business and is one of the primary users of the contractor's financial statements.
General contractors may use subcontractors on a project.	The subcontractor relationship must be managed and controlled.
As a means of generating working capital, contractors will typically "front-end" load contracts in order to accelerate cash receipts and finance the construction project.	Cash flow is a key element to managing a construction project. Overbillings and underbillings are usually an important component of a contractor's balance sheet.

Basic contract types

- Fixed-price or lump-sum
  — Provide for a single price for the total amount of work to be performed on a project.
- Unit-price
  — Provide that a contractor will perform a specific project at a fixed price per unit of output.
- Cost-type or cost-plus
  — Provide for reimbursement of allowable or otherwise defined costs incurred plus a fee that represents profit.

Basic contract types (continued)

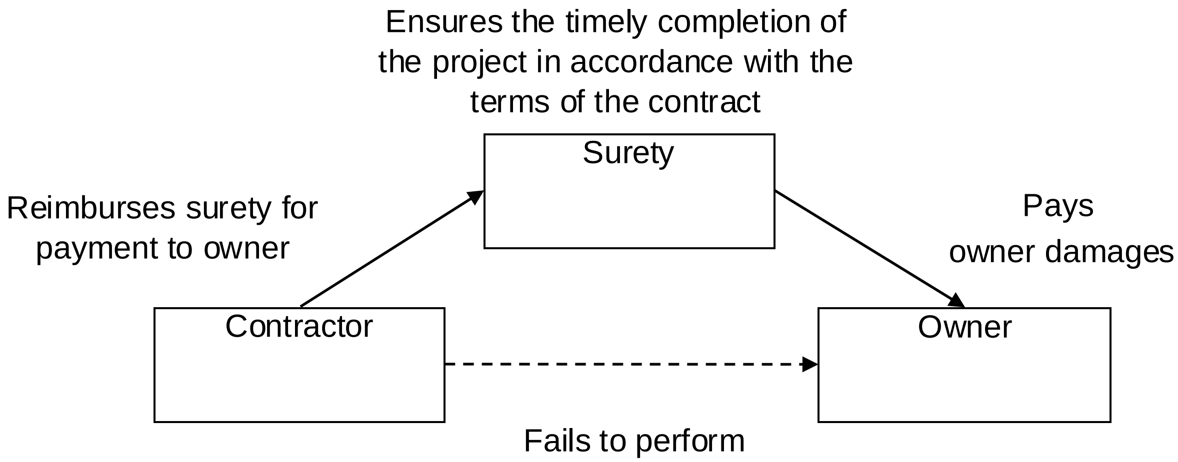
- Time-and-material
  - — Provide for payments to the contractor on the basis of direct labor hours at fixed hourly rates and cost of materials or other specified costs.

Note: The core differences in each type of contract (for example, fixed-price versus unit-price) almost certainly will affect the risk assumed by the contractor.

Change orders

- Modifications to the original contract
- Unforeseen yet frequent
- May affect multiple aspects of the job
- Approved versus unapproved
- Unapproved change orders may create
  - — claims against owner or
  - — back-charges

Surety relationship



Each of these parties is critical in the construction contract relationship.

Subcontractors

- Shared responsibilities
- Lack of complete control
- Reliability, timeliness

Managing cash flow

- A contractor's greatest financing need is working capital.
- Common billing arrangements:
  - — Completion of certain stages of work
  - — Costs incurred on cost-plus contracts
  - — Architects' or engineers' estimates of completion
  - — Specified time schedules
  - — Quantity measures of unit price contracts
- Billings do not match revenue and cost recognition as in commercial businesses.

Example: Job borrow

XYZ Contractors have a project in which estimated costs are $100. The total contract for this project is $120. The estimated cash flows for this job are as follows:

	Period					
	1	2	3	4	5	Total
Cash outflow: Job costs	$(15)	$(20)	$(20)	$(20)	$(25)	$(100)
Cash inflow: Progress payments	25	30	30	20	15	120
Net cash flow	$10	$10	$10	$0	$(10)	$ 20

How the economic environment affects contractors

- “Front-end” contractors affected first – excavators.
- “Finish” contractors affected later:
  - — Electrical
  - — Drywall
  - — Carpentry
- All construction markets affected by supply and demand.
- Residential – housing starts, application for building permits, and interest rates

State of the industry

- Construction spending
- Employment
- Industry outlook

Exercise: Group discussion

Working with a partner, or in a small group, review the resources available and discuss the following questions. Visit the sites listed in the exercise in the participant manual.

- How do the data compare to your perspective on the industry?
- What do the measurements indicate about the current and future states of the construction industry?

Resources for the construction industry

- Industry associations
- Industry analytics
- Publications
- Government resources
- Conferences

Summary

Remember, the construction industry is different from other industries in many ways:

- Contributes a significant portion of the U.S. economy
- Many types of contractors
- Variety of players unique to the industry both inside and outside of the entity
- Construction process is different from a typical sale

Summary (continued)

- Risks not found in many industries
- Impacts from economic downturn for the industry are typically experienced last after backlog is finished

Contract Accounting and Lease Accounting and Their Impact on Construction Contractors

Learning objectives

- Recall the details in the accounting for construction contracts in FASB *Accounting Standards Codification*® (ASC) 606, *Revenue from Contracts with Customers*, including the appropriate accounting alternatives for construction-type contracts.
- Recall the details in the accounting for leases in accordance with FASB *Accounting Standards Update* (ASU) No. 2016-02, *Leases (Topic 842).*

Discussion question

- What are some best practices implemented by you or your clients to properly account for revenue under FASB ASC 606?

ASU No. 2014-09, *Revenue from Contracts with Customers*

- Issued May 28, 2014
  - 759 pages
- Creates FASB ASC 606
- Eliminates the majority of FASB ASC 605, *Revenue Recognition*

ASU No. 2020-05

ASU No. 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*

- Defers, for one year, the required effective date of ASU No. 2014-09, for certain entities that have not yet issued their financial statements (or made financial statements available for issuance) reflecting the adoption of ASU No. 2014-09.
- Annual reporting periods beginning after December 15, 2019, and for interim reporting periods within annual reporting periods beginning after December 15, 2020.
- Entities may elect to follow the original effective date.

Key highlights

- All-inclusive general standard that applies evenly across all industries
  - All prior industry-specific guidance disappears
  - Standard states: *"Previous revenue recognition guidance in U.S. GAAP…should not be used…"*

Key highlights (continued)

- Core concept
  - “(A)n entity recognizes revenue to depict the *transfer of promised goods or services to customers* in an amount that reflects the consideration to which the entity *expects to be entitled.”*
- Focus is on
  - customer control, and
  - expected revenue.

Key highlights (continued)

- Revenue recognition will be applied on a contract-by-contract basis.
- Standard creates a new GAAP definition of a *contract*
  - *Collectibility* must be considered when determining whether a contract exists.
- A single contract may be split into multiple components (performance obligations).

Key highlights (continued)

- Revenue may be recognized *“over time”* or “*at a point in time.”*
- Provides one approach for all industries to account for revenue from licenses as a *“right to use”* or a *“right to access.”*
- Some revenue recognition may be *advanced*; some may be *deferred.*
- Principles-based approach requires greater use of professional judgment.

Five-step revenue recognition process

1. Identify the contract(s) with a customer.
2. Identify the separate performance obligations in the contract.
3. Determine the transaction price.
4. Allocate the transaction price to the performance obligations.
5. Recognize revenue when each performance obligation is satisfied.

Step 1: Identify the contract(s) with a customer

The FASB Master Glossary defines a *contract* as "an agreement between two or more parties that creates enforceable rights and obligations," and affects contracts with a customer that meet all of the following criteria:

a) The parties to the contract have approved the contract (in writing, orally, or in accordance with other customary business practices) and are committed to perform their respective obligations.

b) The entity can identify each party's rights regarding the goods or services to be transferred.

Step 1: Identify the contract(s) with a customer (continued)

c) The entity can identify the payment terms for the goods or services to be transferred.

d) The contract has commercial substance (that is, the risk, timing, or amount of the entity's future cash flows is expected to change as a result of the contract).

e) It is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer.

Additional considerations under step 1

- Does not include master service agreements (MSAs)
  - Purchase orders under an MSA would be considered the contracts
- A contract does not exist if each party to the contract has the unilateral enforceable right to terminate a wholly unperformed contract without compensating the other party or parties

Additional considerations under step 1 (continued)

- If contract does **not** meet prior criteria, or if contract is **not** legally enforceable,
  - Recognize revenue on a deferred cash basis
    1. after receiving all payments and after the entity has no further performance obligations, or
    2. when the contract is terminated and the consideration received to date is nonrefundable.

Exercise: Group discussion — Million-dollar restaurant

A developer enters into a contract for the sale of a building for $1 million. The customer intends to open a restaurant in the building. The building is located in an area where new restaurants face high levels of competition, and the customer has little experience with restaurants. The customer pays a $50,000 nonrefundable deposit and enters into a long-term, nonrecourse financing arrangement with the seller with the intent of repaying the loan from the cash flow of the restaurant.

Does the developer have a contract?

Contract modifications

At times, contracts may be modified for changes in scope or price. The change may be accounted for with a modification of the existing contract, the addition of a second contract, or the cancellation of the old contract and reissuance of a new contract.

If both of the following conditions were present, a new contract would be required for the contract modification:

- Scope of the contract changes due to added goods or services that are distinct (i.e., a separate performance obligation)
- Price of the contract increases by the stand-alone selling price of the added goods or services

Combining contracts

- If any of the following apply, a contract would be *required* to be combined into one contract:
  - The contracts are negotiated as a package with a single commercial objective.
  - The amount of consideration to be paid in one contract depends on the price or performance of the other contract.
  - The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation.

Step 2: Identify the separate performance obligations

The FASB Master Glossary defines a performance obligation as:

A promise in a contract with a customer to transfer to the customer either:

a) A good or service (or a bundle of goods or services) that is distinct.

b) A series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

Example performance obligations

- Sale of goods produced by the entity
- Resale of goods purchased by an entity
- Resale of rights to goods or services purchased by an entity
- Performing a contractually agreed-upon task
- Standing ready to perform
- Acting as an agent
- Granting rights to goods or services to be provided in the future

Distinct

A performance obligation will be considered *distinct* if both of the following conditions are met:

- The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (that is, the good or service is capable of being distinct).
- The entity's promise to transfer the good or service to the customer is separately identifiable from other.

Performance obligations

- Highly dependent and interrelated:
  - Design/build contracts
  - Multiple buildings
  - Operation and or maintenance of facility
- Performance obligations can never be an activity that is performed to satisfy an obligation that does not transfer a good or service:
  - Administrative tasks
  - Mobilization

Exercise: Group discussion — ACME Construction

With a partner, or in a small group, consider the following:

- ACME Construction enters into a contract to sell and install elevators that it has manufactured. ACME will deliver the elevator parts to the customer and then perform the installation. The elevators are so unique that ACME is the only company that can install the specialized elevators. How many performance obligations are there?
- If the elevators could be installed by other contractors, how many performance obligations would there be?

Additional considerations under step 2

- Warranties
  - A warranty will be considered a separate performance obligation if it includes additional goods and services.
  - If the customer has the option to purchase a warranty separately, it is generally considered a separate performance obligation.
  - If the customer does not have that option, it will be considered a separate performance obligation only if it provides the customer with service in addition to the warranty assurance.

Additional considerations under step 2 (continued)

- FASB ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, provides additional examples of separate performance obligations.
- Notes that performance obligations that are immaterial to a contract do not have to be separately identified.

Step 3: Determine the transaction price

- Use customary business practices
- Defined as the amount of consideration an entity expects to receive in exchange for transferring promised goods or services.
- May include the following:
  - Fixed amounts
  - Variable amounts
  - Both

What is variable consideration?

- Discounts
- Rebates
- Refunds
- Credits
- Incentives
- Bonuses, penalties (liquidated damages)
- Price concessions

Effect of variable consideration

Two methods for estimating transaction price:

1. Expected value method
   - Consider a range of possibilities using a weighted average approach.
2. Most likely method
   - Select the single most likely amount within a range.

Additional considerations under step 3

- Noncash consideration
  - Measure at fair value
  - Secondary measure is stand-alone selling price
- Time value of money
- Consideration paid to customer = reduction of revenue
- Claims

Construction claims

- Unapproved change order for scope and price
- Considered variable consideration
- Major change from how we have assessed claims under the old standards
- Entity is able to recognize revenue and profit on a claim, as long as it is probable that a significant reversal of the revenue recognized on the claim will not happen in the future

Step 4: Allocate the transaction price to the performance obligations in the contract

The transaction price is allocated to separate performance obligations in proportion to the *relative stand-alone selling price* of the promised goods or services.

It may be different than the pricing indicated in the contract.

If stand-alone price is not directly observable

Adjusted market assessment approach

— The entity may review the prices charged by other contractors in the industry to determine the price a customer would be willing to pay for the separate performance obligation.

Expected cost plus margin approach

— The entity may calculate what it would be willing to charge for the separate performance obligation by determining their costs and adding an appropriate margin of profit.

If stand-alone price is not directly observable (continued)

Residual approach

— The entity may assign the remaining contract price to a separate performance obligation when the remaining performance obligations have observable stand-alone prices. The residual approach is only used when the selling price is highly variable and uncertain.

Changes in transaction price

- Any change in transaction price subsequent to the initial allocation will be reallocated using the same basis as the initial determination.
- Revenue recognized will be adjusted in the period of the change.
- A reallocation will not occur if only the stand-alone selling prices change.

Example 4

ACME Construction has a contract to build a road for Road Runner Enterprises. The total contract price, including variable consideration, is $10,000,000. The project has three phases — clearing, grading, and paving. The contract states that the pricing for each phase is one-third of the contract. The phases of the contract have the following separate stand-alone values:

— Clearing:	$2,500,000
— Grading:	$4,000,000
— Paving:	$6,500,000

Total stand-alone value: $13,000,000

Example 4 (continued)

The allocation of the total contract price to each performance obligation would be as follows:

- Clearing: $1,923,077 {$10,000,000 contract price × (2,500,000 ÷ 13,000,000)}
- Grading: $3,076,923 {$10,000,000 contract price × (4,000,000 ÷ 13,000,000)}
- Paving: $5,000,000 {$10,000,000 contract price × (6,500,000 ÷ 13,000,000)}

Total contract price = $10,000,000

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

- Revenue is recognized when each separate performance obligation is *satisfied*.
- A performance obligation is satisfied when the promised good or service is *transferred* to the customer.
  - — A good or service is assumed to be transferred when the customer obtains *control* of that good or service.
- Revenue may be recognized over time or at a point in time.

Indicators of control

- Indicators of obtaining control include when the customer has the following:
  - An unconditional and enforceable obligation to pay
  - Legal title
  - Physical possession
  - Significant risks and rewards of ownership

Recognition over time

- Performance obligations are satisfied *over time* when
  - customer simultaneously receives and consumes the benefit as the entity performs the task,
  - performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or
  - entity’s performance does not create an asset with alternative use to the *entity*.

Measures of progress

Output methods include the following:

- Milestones reached
- Survey of performance
- Appraisals of results achieved
- Units produced or delivered

Measures of progress (continued)

Input methods include the following:

- Resources consumed
- Efforts expended or resources consumed such as costs incurred compared to total expected costs
- Labor or machine hours expended compared to total labor
- Machine hours expected

Additional considerations

- Retainage receivable
- Significant inefficiencies in performance
- Uninstalled materials
- Costs incurred that are not indicative of performance
- Costs incurred that do not transfer value
- Loss contracts
- Contract acquisition costs

Retainage receivable

Where retentions are subject to conditions *other than passage of time*, such as fulfillment guarantees, future performance, or achievement of stated milestones, amounts related to retention receivables would continue to be classified as a contract asset or contract liability until such time that the right to payment becomes unconditional.

Significant inefficiencies in performance – Using a cost-based input method

- Entity incurs significant inefficiencies in the performance on a contract.
- Cost determined to be a result of significant inefficiencies in performance would not be included in the estimated cost of the project and cost incurred to date.
- Cost would be expensed as incurred.
- Costs would affect the current year financial statements dollar for dollar of the significant inefficiencies.

Uninstalled materials

- Goods purchased for a project that have not been installed on project
- Control has not passed:
  - Nondistinct
  - Distinct
- Control has passed:
  - Is the cost indicative of performance?

Cost incurred that are not indicative of performance

There may also be circumstances in which the cost incurred on contract is not proportionate to the entity's progress in satisfying the performance obligation.

For example, construction entities may enter into contracts where they procure equipment and material. The procurement alone of those products likely would not be indicative of the entity's performance, unless the company has the right to payment for the cost for the procurement plus a reasonable profit, such that the procurement itself represents progress toward completion.

Cost incurred that are not indicative of performance (continued)

- If all of the following are met, the entity should only recognize revenue to the extent of the cost incurred on the nonproportionate costs items incurred:
  - — The good is not distinct.
  - — The customer is expected to obtain control of the good significantly before receiving services related to the good.
  - — The cost of the transferred good is significant relative to the total expected costs to completely satisfy the performance obligation.
  - — The entity procures the good from a third party and is not significantly involved in designing and manufacturing the good (but the entity is acting as a principal).

Costs incurred that do not transfer value

- Entity incurs cost that does not provide value to the customer, the entity is not allowed to recognize revenue related to this type of cost.
  — For example:
    - Mobilization to the site
    - Surety bonds
    - Administrative costs to setup a project
- Cost of these items would be removed from the cost incurred on the project and amortized over the life of the contract.

Loss contracts

- Provision for loss determined at contract level
- Election to determine provision at the performance obligation level
  - Would be required for all current and future similar types contracts

Contract acquisition costs

The incremental costs related to obtaining a contract are capitalized and amortized on a systematic basis consistent with transfer of goods and services.

Contract acquisition costs may include the following:

- Consulting fees
- Sales commissions

As a practical expedient, an entity may expense these costs when incurred if the amortization period is one year or less.

Disclosure

- Transition method adopted
- Nature, amount, timing, and uncertainty of revenue and cash flows from contracts
- Contract balances
- Performance obligations
- Significant judgements
- Cost to obtain or fulfill a contract
- Policy decisions
- Amortization and impairment of capitalized contract costs

Completed contract method

- Should only be used if one of these is true:
  - It does not vary materially from the percentage-of-completion method.
  - The contractor is unable to make reasonably dependable estimates.

Leases

On February 25, 2016, FASB issued ASU No. 2016-02, *Leases (Topic 842).* The objective of the ASU is to increase transparency and comparability in financial reporting by requiring balance sheet recognition of leases and note disclosure of certain information about lease arrangements. This ASU codifies the new FASB ASC 842, *Leases*, and makes conforming amendments to other FASB ASC topics.

Discussion question

- What are some challenges clients have had applying ASU No. 2016-02?
- How has the application of the new lease standard affected financial statements?

ASU No. 2020-05

ASU No. 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*

- Defers the effective date for one year for entities in the “all other” category and public NFP entities that have not yet issued their financial statements (or made financial statements available for issuance) reflecting the adoption of ASU No. 2016-02.
- Effective for entities within the “all other” category for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022.
- Entities may elect to follow the original effective date.

Application

Applies to all leases except the following:

- Leases of intangible assets
- Leases to explore for or use nonregenerative resources such as minerals, oil, and natural gas
- Leases of biological assets, such as timber
- Leases of inventory
- Leases of assets under construction

Is it a lease or a service arrangement?

- A lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration.
- An entity would determine whether a contract contains a lease by assessing whether there is an identified asset.
  - — Has a specific asset been identified?
  - — Does the customer control the use of the identified asset?
  - — Can the lessor substitute the asset?
  - — Who bears the risk of loss?

Highlights of ASU No. 2016-02

- Right of use model
  - *All* leases go on the balance sheet
  - Potential negative effect on ratios
- *Optional exemption* for leases with terms less than 12 months
- Classify leases as *finance* or *operating*
  - *Finance – Lessee obtains control of underlying asset*
  - *Operating – Lessee does not obtain control*
  - *Similar balance sheet impact*
  - *Different impact on income statement and statement of cash flows*

Finance versus operating

- No distinction between leases of real property and other leases but
  - finance leases – likely personal property, and
  - operating leases – likely real property.

Finance lease classification

When a lease meets one of the following five criteria, it will be considered a financing lease:

1. Transfer of ownership to lessee

2. Purchase option reasonably certain to be exercised

3. Lease term for major portion of asset's economic life

4. Present value of lease payments and residual value exceeds substantially all of the fair value of the underlying asset

5. Specialized nature of underlying asset results in no expectation of alternative use after the lease term

Finance leases

Leases of nonproperty (personal property)

- Lease is for major part of asset's remaining economic life
  - Except if leasing an asset at or near the end of its life
  - That is, If the lease commences in final 25% of life
- PV of payments is substantially all of the asset's fair value

Operating leases

Leases of property (land and buildings)

- Lease is for an insignificant part of asset's economic life, or
- PV of payments is insignificant compared to asset's fair value

Lessee — Lease term

Includes the following:

- Noncancellable term plus the following:
  - Any renewal periods for which there is a significant economic incentive to renew (reasonably certain)
    - Bargain renewals
    - Lease termination penalties
- Needs to be reassessed regularly
- Changes may create gain or loss

Effect on the balance sheet

At date of commencement recognize the following:

Dr. Right-of-use asset

Cr. Lease liability

Effect on the balance sheet (continued)

Right-of-use asset

- The initial lease liability
- Lease payments made to the lessor at or before the lease commencement date
- Initial direct lease costs (only commissions or payment made to the prior lessee)

Effect on the balance sheet (continued)

Lease liability

- The present value of the remaining minimum fixed lease payments
- Any variable lease payments tied to a specific index or rate (such as an escalation clause)
- The exercise of the purchase option when reasonable expected to be exercised
- Any amounts owed for a residual value guarantee
- Less and lease incentives received from the lessor

Effect on the income statement

Finance lease	Operating lease
Amortization expense	N/A
Interest expense	N/A
N/A	Lease expense
Expense reported below EBITDA	Expense reported above EBITDA
Front-loaded expense	Straight-line expense

Lessee — Income statement recognition

Finance lease (Personal property)

Dr. Right-of-use asset

Cr. Lease liability

- Amortization expense
- Interest expense

Lessee — Income statement recognition (continued)

Operating lease (Real property)

Dr. Right-of-use asset

Cr. Lease liability

\+ Amortization expense

\+ Interest expense

Lease expense (Straight-line)

Statement of cash flows

- Financing lease
  - Repayment of principle = Financing activity
  - Interest expense = Operating activity
- Operating lease
  - All payments = Operating activity

Lessee disclosures

- Disclosures include the following:
  - Reconciliation of beginning and ending balance of lease liabilities
  - Maturity analysis of undiscounted cash flows
  - Information about the principle terms of the lease
  - Expenses related to variable payments

Lessor accounting for leases

- Generally the same as current GAAP
- No distinction between leases of real estate and leases of other assets
- Three classifications of leases:
  — Sales-type — Convey risks and rewards and transfer control of asset

  — Direct financing — Convey risks and rewards without transfer of control

  — Operating — Does not convey risks and rewards or control

Lessor accounting for leases (continued)

- Lessor may not recognize profit for lease that does not transfer control of the underlying asset to the lessee.
- All leases that do not transfer control of the underlying asset to the lessee and for which collectibility of the lease payments is not probable should be classified and accounted for as operating leases.

Sales-type leases

Sales-type leases	
At the commencement date	**After the commencement date**
Lessor derecognizes the underlying asset and recognizes the following: • Net investment in the lease (lease receivable and unguaranteed residual asset) • Selling profit or loss arising from the lease • Initial direct costs as an expense	Lessor recognizes the following: • Interest income on the net investment in the lease • Certain variable lease payments • Impairment

Direct financing leases

Direct financing leases	
At the commencement date	**After the commencement date**
Lessor derecognizes the underlying asset and recognizes the following: • Net investment in the lease (lease receivable and unguaranteed residual asset reduced by selling profit) • Selling loss arising from the lease, if applicable • Impairment	Lessor recognizes the following: • Interest income on the net investment in the lease • Certain variable lease payments

Considerations for other financial statements

Statement of financial position

- Separate presentation of lease assets (that is, aggregate of lessor’s net investment in sales-type leases and direct financing leases) from other assets
- Classified as current or noncurrent based on the same considerations as other assets

Considerations for other financial statements (continued)

Statement of comprehensive income

- Presentation of income from leases in the statement of comprehensive income or disclosure of income from leases in the notes with a reference to the corresponding line in the statement of comprehensive income
- Presentation of profit or loss recognized at the commencement date in a manner appropriate to lessor’s business model

Considerations for other financial statements (continued)

Statement of cash flows

- Presentation with operating activities — cash receipts from leases

Operating leases

Operating leases	
At the commencement date	**After the commencement date**
Lessor defers initial direct costs.	Lessor recognizes the following: • The lease payments as income in profit or loss over the lease term on a straight-line basis (unless another method in more representative of the benefit received) • Certain variable lease payments as income in profit or loss • Indirect costs as an expense over the lease term on the same basis as lease income

Considerations for other financial statements

Statement of financial position

- Presentation of an underlying asset subject to an operating lease in accordance with other FASB ASC topics

Statement of comprehensive income

- Separate presentation or disclosure of lease income

Statement of cash flows

- Presentation with operating activities — cash receipts from leases

Summary

This discussion focused on major changes in construction accounting including revenue recognition and accounting for leases.

- Revenue recognition – Effective now
- Leases – Effective now

Construction Cost Allocations

Learning objective

- Identify the components of job costs incurred, the common categories into which the costs are divided, and the impact of both direct and indirect costs on the contractor.

Job costs

Job cost is more than just invoices and payroll.

What about *indirect* costs associated with those specific invoices and certain time sheets?

More on job costs

The costs incurred by a contractor can be divided and classified as follows:

- Some costs are reasonably allocable to both individual contracts and individual tasks within contracts.
- Some costs are reasonably allocable to individual contracts but not to individual tasks within contracts (frequently termed *general conditions* or *job overhead*).
- Some costs are not reasonably allocated to either individual contracts or individual tasks within contracts (frequently termed *selling, general, and administrative expenses* or *period costs*).

Five true job cost areas

- Labor costs
- Material costs
- Subcontract costs
- Equipment costs
- Job overhead and general conditions

Indirect costs

- Those costs that are reasonably allocable to individual contracts but not directly identifiable to those tasks within individual contracts

Labor costs

- Direct wages, payroll taxes, union burden costs
- Other:
  - Workers' compensation insurance
  - Company-paid health insurance
  - Payroll taxes
  - General liability insurance
  - Vacation and sick leave
  - Bonus and profit-sharing

Labor cost pooling and allocation

- Accumulates costs of various labor expenditures
- Allocates such expenditures as a percentage of labor costs to a particular job
- Applied much like that of a payroll tax to the direct wages charged to a project

Exercise: Group discussion — BBC, Inc. labor pool

Working with a partner, or in a small group, consider the scenario and following questions:

- BBC, Inc. is a mason contractor that estimated the following labor costs for 2020.

Labor	$700,000
Co. paid health insurance	$325/mo. per emp.
Co. paid benefits**	$135/mo. per emp.
Workers’ comp	21% of labor dollar
Payroll taxes	Roughly 9% of labor dollar
Number of emp.	20
** Benefits include vacation, sick, and dental combined as a monthly amount due.	

Exercise: Group discussion — BBC, Inc. labor pool (continued)

- Based on the information presented, what would be the estimated total costs included in the labor pool?
- What percentage would be applied to each job for the company-paid health insurance and other company-paid benefits?

Material and subcontracting costs

- Material costs are the costs of materials, plus freight costs, that become a part of the construction project.
- Subcontract costs are costs incurred under subcontract agreements with other contractors.

Equipment costs

- Outside
  - Rentals
  - Typically charged directly to a particular job
- Owned
  - Charged to jobs via equipment pool
  - Similar to the labor cost pool
  - Includes usage, salvage values, interest costs, depreciation, fuel usage, repairs and maintenance, taxes, insurance, and other costs
  - May use fair market rental rate
    - Watch for “phantom” profits.

Job overhead and general conditions

- Based on the fact that some costs may be direct costs specifically identifiable to the job, and indirect costs that are considered job costs but cannot be specifically identifiable to a job
- Allocated to jobs (e.g, direct labor dollars, labor hours, revenues, subcontract costs, or equipment usage)

The impact on estimators and project managers

Accountants, estimators, project managers, and superintendents must be made aware of these costs being allocated and accounted for on jobs.

- Estimators must be aware of the labor burden rates and equipment rates to properly bid work. Some may use rates established years back.
- Many project managers and superintendents are awarded based on the profit they bring in on a job they are managing.

Alternative overhead strategies when contract volumes are low

- Fluctuations in contract volume can be significant.
- When volumes are low and bids are highly competitive, the contractor’s goal should be to cut its losses.
- Changes to pools
  - Equipment (fixed and variable costs)
  - General overhead

Selling, general, and administrative costs

- Expenses that an organization will incur in the event that the contractor has zero contracts in progress
- “Worst case scenario” approach
- Only financial category that can be budgeted

Break-even analysis

- Must obtain a break-even (level of revenues a company must achieve at a certain gross profit margin in order to cover a company’s overhead)
- Must be able to estimate the general and administrative expenses it expects to incur over the fiscal year
- Beneficial to estimating and bidding projects

Summary

- Most contractors understand the direct and identifiable costs that go into completing a project.
- It is the indirect costs that are usually missed.
- The accounting for labor burdens, equipment burdens, and overhead allocations are costs that can make attractive, profitable jobs soon become disasters in the making.

Financial Statements for the Construction Contractor

Learning objectives

- Identify the unique characteristics of the contractor financial statements — specifically, accounts generally unique to construction contractors.
- Identify the unique disclosures common to contractor financial statements.
- Recall the unique supplementary information normally included in the financial statements of a construction contractor.

Financial statements

- *Balance sheet* — The balance sheet is a critical financial statement assessed by financial statement users. It is analyzed to determine working capital, bonding limits for individual contracts, bond programs for the contractor, debt implications, and many more issues that affect the contractor.
- The FASB Master Glossary defines the *operating cycle* as

> The average time intervening between the acquisition of materials or services and the final cash realization constitutes an *operating cycle*.

Financial statements (continued)

Income statement — The importance of the income statement is to summarize the details provided by the standard schedules included in the supplementary information.

Financial statements (continued)

- *Notes to the financial statements* — Due to the unique accounts presented by construction, contractors require unique disclosures of certain information.
- *Supplementary information* — Many questions arise regarding what to include and what not to include in the supplemental information of financial statements. The best advice that can be given is to provide the user of the financial statements the information needed to make a well-informed decision.

Exercise 1: Group discussion

With a partner, or in a small group, create a list of financial statement accounts that you believe are unique or important to construction contractors?

Balance sheet — Assets of greater importance to contractors

- Contracts receivable, net of allowance including unconditional retainage
- Contract assets, including conditional retainage
- Capitalized costs to fulfill contracts
- Equipment and small tools specifically purchased for, or expected to be used solely on, an individual contract
- Investments in joint ventures (depending on when joint venture will complete work)

Contract asset

The FASB Master Glossary defines *contract asset* as follows:

> An entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the entity's future performance).

Balance sheet — Liabilities of greater importance to contractors

- Accounts payable and accrued expenses
- Contract liabilities net of conditional retainage
- Capitalized costs to fulfill contracts
- Lease obligations
- Accrued losses on uncompleted contracts
- Accounts payable on contracts

Contract liability

The FASB Master Glossary defines *contract liability* as follows:

> An entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer.

More on contract assets and liabilities

- Under FASB ASC 606, certain **contract-specific assets** are to be categorized as contract assets. These amounts include retainage receivable (if that retainage is not satisfied by the passing of time only) and revenue in excess of billings and unbilled retainage on uncompleted contracts.
- Under FASB ASC 606, certain **contract-specific liabilities** are to be categorized as contract liabilities. These amounts include billings and unbilled retainage in excess of revenues earned on uncompleted contracts and customer deposits.

Statement of income

Specific accounts to look at include the following:

- Contract revenues
- Cost of revenues
- S, G, & A (will want detail)
- Income from investments and joint ventures

Statement of changes in equity

- Review example

Statement of cash flows

Specific areas to look at include the following:

- Operating
- Investing
- Financing

Exercise 2: Group discussion

With a partner, or in a small group, create a list of disclosures that you believe are unique or important to construction contractors?

Sample disclosures

- Nature of operations and significant accounting policies
- Contracts receivable
- Revenue recognized and costs incurred on uncompleted contracts
- Equity investments
- Note receivable
- Property and equipment
- Financing arrangements

Sample disclosures (continued)

- Stock redemption agreements
- Leases
- Income taxes
- Retirement plans
- Commitments and contingencies
- Variable interest entity
- Backlog

Supplementary information

- Common and alternative schedules
  - Schedule of contract revenues earned
  - Schedule of completed contracts
  - Schedule of contracts in progress
  - Schedule of contract assets and liabilities by contract

Supplementary information (continued)

- Examples

  Supplying adequate information for the surety to assess your client’s financial situation is very important. If you do not supply the supplemental information within your financial statements, the surety will likely obtain from the contractor.

Summary

Of all the work one does for the construction client, there is nothing more important than the year-end financial statements. Such statements are reviewed and evaluated to make critical decisions by its users. Therefore,
it is very important that the preparer of such financial statements understand the proper presentation of such financial statements in the construction industry.

Construction Contractors – Working With a Surety

Learning objectives

- Recall the main reasons for and types of surety bonds in the construction industry and the advantages to the owner of such bonds.
- Identify the various financial benchmarks a surety or surety agent might analyze in a contractor’s financial statements to determine the amount of the contractor’s surety credit.

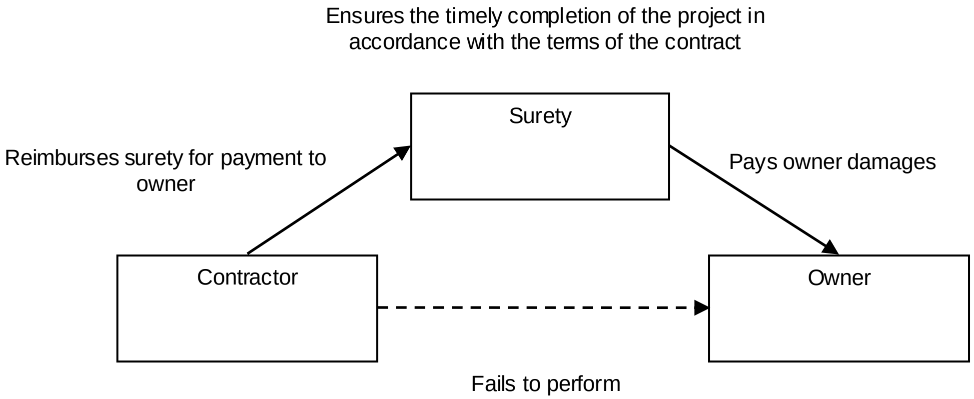
Polling question

- For the CPAs — Do you know who your client's surety is?
- For the contractors and controllers — Do you know who your surety is?

Surety bond

- A promise to pay one party (the *obligee*) a certain amount if a second party (the *principal*) fails to fulfill the terms of a contract
- The surety bond protects the obligee against losses resulting from the principal's failure to meet the obligation
- Guarantee, **not** insurance

Surety process



Benefits of surety bonds

- A bond ensures that the owner will receive a finished product at the negotiated price.
- The surety's due diligence process is designed to determine the competency of the contractor. In effect, the surety company prequalifies the contractor by eliminating those contractors that are unqualified to perform the work.

Types of surety bonds

Bond type	Description	The surety's responsibility
Bid bond	States that the surety believes the contractor has the ability and resources to complete the project at the bid price. Assures that contractor will file its performance and payment bonds if awarded the contract. Used by owners to prequalify contractors.	If contractor is awarded the contract but refuses to sign it, surety must pay owner difference between the winning bid and the next lowest bid.
Performance bond	Guarantees that contractor will complete project as specified by the contract.	If contractor deviates from contract terms, surety must reimburse owner for any losses.
Maintenance bond	Guarantees against any faulty workmanship or materials. Usually good for one year after construction is complete.	In the event of faulty workmanship or materials, surety must reimburse owner for any losses.

Types of surety bonds (continued)

Bond type	Description	The surety's responsibility
Payment bond	Guarantees payment to subcontractors and suppliers. Assures owner that project will be free of liens from unpaid subcontractors or suppliers.	If contractor fails to pay subcontractors or suppliers, surety is required to pay.
Completion bond	May be issued in lieu of performance and payment bonds. Guarantees that the contractor will perform and pay for all contracted work.	If contractor fails to perform, surety must find another contractor to finish the work.

Additional protections of surety bonds

- Owners, lenders, contractors, and subcontractors are protected. The reasons for such protection are
  - the contractor has undergone a rigorous prequalification process and is judged capable of fulfilling the obligations of the contract;
  - contractors are more likely to complete bonded projects than nonbonded projects since the surety company more than likely will require personal or corporate indemnity from the contractor;
  - subcontractors have no need to file mechanic’s liens on a private project when a payment bond is in place;
  - bonding capacity can increase a contractors or subcontractors project opportunities;
  - the surety bond producer and underwriter may be able to offer technical, financial or management assistance to a contractor; and
  - the surety company fulfills the contract in the event of contractor default.

Surety versus traditional insurance

Characteristics of surety involvement	Characteristics of traditional insurance
Three-party relationship	Two-party relationship
Risk-transfer technique	Risk-transfer technique
Protect obligee	Protect insured
Regulated by state insurance commissions	Regulated by state insurance commissions
No expectation of losses	Calculated pooled risk
Project specific	Term specific
Penal sum	Policy limits

Surety underwriting — Three Cs

- Character
  — Does the contractor’s past record indicate good character and responsibility in fulfilling its obligations and contracts?
- Capacity
  — Does the construction firm have the skills, experience, knowledge, and equipment necessary to perform the work?
- Capital
  — Does the construction firm have the money, or access to the money, to perform the work?

Surety underwriting — Additional Cs

- CPA
  - — Reputation
  - — Experience
- Contractor’s continuity plan
  - — Succession plan
  - — Business continuity plan

Exercise: Group discussion on sureties

With a partner, or in a small group, discuss the following questions.

- Does your surety want an audit, review, or compilation?
- What types of information do you have to submit to the surety before a bond can be issued?
- Which of the "five Cs" do you think is most important to your client's surety?

Surety process

- Begins with a bonding agent
  - — Perform the first analysis of the contractor and determine which surety is best suited for that particular contractor.
- Surety then reviews financial statements
  - — Commonly a ratio-driven review.

Surety documentation

- Financial information:
  - Audited financials, within 90 to 120 days
  - Interim financial statements
  - Current tax returns
  - A/R and A/P aging
  - Equipment schedules
  - Owner’s personal financial statements
- Project profit and loss statements
- Bank agreements
- Org chart and resumes of key personnel

Surety documentation (continued)

Company information

- Organizational chart
- Resumes of key personnel
- Description of accounting system
- Management policies for monitoring job performance
- Business plan
- References (subs, suppliers, architects, customers)
- *Contractor's qualification statement* (AIA)

Surety documentation (continued)

Job information

- Current contracts
- Bid history
- Job history

Other information

- Banking relationships
- Evidence of line of credit
- Liability insurance

Example ratios used by sureties

To measure	Use ratio	And look for
Profitability	Gross profit percentage	Trends Comparison to industry averages
Profitability	Net income as a percentage of revenue	Trends Comparison to industry averages
Profitability	Backlog gross profit to G&A	Should be greater than 50%
Profitability & liquidity	Underbillings to equity	Must be less than 20%
Liquidity	Net quick Current assets – (Inv + Ppd) : Current liab – Def taxes	Must be greater than 1:1 Comparison to industry averages
Liquidity	Cash to equity	Should be greater than 20%

Example ratios used by sureties (continued)

To measure	Use ratio	And look for
Liquidity	Cash to overbilling	Must be greater than 1:1
Debt	Total liabilities : Net worth	Less than 3:1 is considered good
Debt	Interest-bearing debt : Net worth	8:1
Debt	Debt coverage	Over 1.25
Gen. & Admin. Exp.	G&A revenue	Comparison to industry averages Whether ratio stays relatively constant in slow times Should be less than 5% (excluding other discretionary expenses)
Officer’s salaries	Officers’ salaries : Revenue	Comparison to industry averages

Additional financial ratios

- Cash greater than 5% of revenue
- Available line of credit greater than 5% of revenue
- Surety working capital at least 7.5% of revenue
- Equity greater than 10% of revenue
- No net underbillings
- Overbillings at least 2% of revenue

Other information used by a surety

- Accounts receivable aging
  - A surety analyzes the accounts receivable aging for the same reason an auditor analyzes the aging–to determine whether the receivables are collectible.
- Marketable securities and notes receivable
  - How willing is the owner to convert marketable securities to cash?
  - What transaction created the notes receivable?
- Overbillings and job borrow
  - A surety will analyze job borrow and compare that amount to the amount of cash on hand. Job borrow that is too high in relation to cash on hand is a red flag for most sureties.

Other information used by a surety (continued)

- Property and equipment
  - A surety’s primary concern is whether the contractor has enough equipment to perform the job it has been asked to bond.
  - Sureties are also concerned about contractors that have significant underused/extra equipment.
- Debt
  - The scheduled maturity of long-term debt (a GAAP-required disclosure) is important information for sureties because it helps them understand the future cash flow requirements of the contractor.
  - They are particularly interested in the amount and timing of any balloon payments.

Other information used by a surety (continued)

- Underbillings
  - Significant or chronic underbillings is a red flag that will raise questions.
- Profitability
  - Sureties will be interested in the consistency of profit margins between jobs and between completed and uncompleted work.
- Statement of cash flows
  - The statement of cash flows will help the surety understand the contractor’s activities during the year, particularly those that are not portrayed in the income statement or balance sheet.

Calculating surety credit

Starts with current assets, GAAP basis

- Less:
  - — A/R and Notes from officers, employees, or owners
  - — One half inventory **not** on job site
  - — Prepaid expenses
- Add:
  - — Cash value of life insurance
  - — Very collectible notes receivable
- Max surety credit = 10x working capital

Exercise: Group discussion on applying for bonding

With a partner, or in a small group, consider the following:

- If you were a surety, what indicators would make you nervous about the company applying for bonding? List five indicators.

Warning signs to surety

- Poor financial reporting system
- Personnel turnover
- Unsuitable clients
- Onerous contract terms
- Change in business plan
- Increase in out of state work
- Maximized lines of credit
- Increase in self-performed work (reduced use of subcontractors)
- Poor estimating and project management
- “Profit fade”

Case study: XYZ Contractors

The balance sheet, income statement, and schedule of uncompleted contracts for XYZ Contractors are presented in a case study of the participant manual.

Using that financial information perform or answer the questions presented in the case study.

- Using the general rules of thumb presented in this discussion, calculate working capital for surety credit purposes (assume that inventory includes general materials and supplies that are not associated with a specific job).

Summary

This discussion provided you with additional details of the surety underwriting process, including:

- An overview of the relationship among contractor, surety, and owner
- the various types of surety bonds a contractor may be required to post
- how a surety or surety agent might analyze a contractor’s financial statements to determine the amount of its surety credit

Summary (continued)

Any CPA who provides services to construction contractors should develop a good understanding of the relationship between contractor and surety and how the surety uses the contractor's financial statements in its decision-making process.

Audit Risks of a Construction Contractor

Learning objective

- Identify the riskiest areas when auditing the contracts of a contractor and recall common audit procedures that must be performed to address these specific risks.

Audit risk model

Audit risk = (inherent risk + control risk) × detection risk

$$AR = RMM \times DR$$

This model is not intended to be a mathematical formula.

Audit risk model (continued)

- *Inherent risk* and *control risk* are the entity's risks to manage.
- The risk of material misstatement (RMM) is the auditor's combined assessment of inherent risk and control risk.

$$\text{RMM} = \text{IR} \times \text{CR}$$

Exercise: Group discussion

Working with a partner, or in a small group, consider the following question:

- Based on your experience with various construction contractor clients, what do you believe the top 10 riskiest areas are?

Top 10 (really 11) audit risk areas

Top 11 risks to consider for a construction contractor:

- Risk of individual contract
- Change order or no change order
- Estimated cost to complete
- Confirm with the owner
- Read the contract
- Workers' comp issues

Top 10 (really 11) audit risk areas (continued)

- Contractor accounting systems
- Fraud at the contract level
- Who is using the financials
- Going concern
- Deferred tax implications

Risk of individual contract: Phase one

Review schedule of uncompleted jobs

- Percent complete
- Size of project

Risk of individual contract: Phase two

Make inquiries of management

- Type of project
- Timing and scheduling
- Location
- Weather
- Owner or investor
- Subcontractors
- Bid spread

Risk of individual contract: Phase three

Obtain detailed information

- Profit fade
- Underbilling
- Type of contract
- Claims

Change order or not

- Not probable
  - Expense costs
  - Revise estimates
- Probable
  - Defer costs until approved
  - Recognize cost with wash effect to revenue
  - Recognize profit if its probable that change order will be obtained

Change order or not (continued)

- Auditing procedures
  - Vouch accumulated costs associated
  - Evaluate within scope of contract
  - Evaluate claim
  - Evaluate contractor’s past successes
  - Evaluate chance of pursuit

Auditing estimated cost to complete

- Review and test process by management
  - Identify and understand significant uncertainties
  - Understand internal control structure
- Develop independent expectation
  - Be aware of contractor’s history
  - Compare actual to budget
  - Compare assumptions to terms of contract
  - Discussion with personnel

Auditing estimated cost to complete (continued)

- Review subsequent events
  - Review subsequent estimates, events, and transactions
  - Look for disputes and contingencies

Confirmation of the contract

- Original contract price
- Approved change orders
- Billings and payments
- Retentions held
- Details on claims, back charges, and disputes
- Estimated completion date or percent
- Other

Reading the contract

- Guarantees
- Penalties and incentives
- Cancellation and postponement provisions
- Other files in possession of contractor

Workers' comp issues

- Monthly payroll submittals

or

- Annual estimate of payroll expenditures

Contractor’s accounting system

- Adequate internal controls
- Permits coding of costs to proper jobs
- Ability to generate management reports
- Integration with other functions
- Allocation of indirect costs

Users of the financial statements

- Sureties
  - — Character
  - — Capacity
  - — Capital

Users of the financial statements (continued)

- Bond agents
- Financial institutions
- Equipment finance companies and other vendors

Contractor as a going concern

- Evaluation now initially management’s responsibility
- Procedures as any other going concern engagement
- Additional items to consider
  - — Break-even point for fixed overhead
  - — Backlog gross profit
  - — Signed contracts on hand
  - — Involvement by surety

Implication of deferred taxes

- Tax law unique to contractors in IRC Section 460
- Temporary differences
  - Depreciable basis
  - Income recognition methods
  - Uninstalled materials
  - Accrued loss on jobs in progress
  - Small tools
  - Cost capitalization
  - Combining and segmenting
  - Claims

Warning signs for the auditor

- Internal reporting
  - — Poor management reporting
  - — Poor collections
- Estimating
  - — No review of estimates
  - — Multiple quotes from vendors not obtained

Warning signs for the auditor (continued)

- Job costing
  — No job cost or revenue reconciliations performed
  — No allocation of indirect costs
- Communication
  — Poor communication between project management, estimators, and accounting
  — Hiding information from surety or bond agent
  — Unorganized job files

Warning signs for the auditor (continued)

- Analytical procedures
  - — Large underbillings
  - — Numerous underbillings
  - — Numerous break-even or loss jobs
  - — Downward trend of gross margins
  - — Frequent disputes and unapproved change orders
  - — Significant bad debt expense
  - — Days in A/R significantly exceed industry average
  - — Retention receivable and retention payables out of sync

Summary

- The risk of performing an audit engagement or a review-level engagement for a contractor can be high.
- By considering the top 11 areas of concern mentioned in this study, the accountant will achieve both an effective and efficient engagement.

Audit Planning and Risk Assessment Procedures

Learning objectives

- Recall the considerations of the applying risk assessment procedures specifically in the audit of construction contractors.
- Recall the common three phases of contract review during audit planning.
- Identify other preliminary procedures and areas of concern common to an audit of a construction contractor.

Planning the audit

- Audit planning from two perspectives
  - That on an overall basis, some entities are riskier than others simply based on the nature of their business. The first section of this discussion will help you identify high-risk construction contractors.
  - The audit of a contractor is the audit of individual contracts. The second half of this discussion will help you identify high-risk contracts.

Planning the audit (continued)

- AU-C section 300 establishes requirements and provides guidance on the considerations and activities applicable to planning and supervision of an audit conducted in accordance with GAAS, including
  - — the involvement of key engagement team members in planning;
  - — preliminary engagement activities; and
  - — general planning activities, including establishing an overall audit strategy that sets the scope, timing and direction of the audit and that guides the development of the audit plan.

Planning the audit (continued)

- Auditors communication with those charged with governance
  - It is critical in any audit that open communication be established with those charged with governance.
- Materiality
  - determining the nature and extent of risk assessment procedures;
  - identifying and assessing the risks of material misstatement; and
  - determining the nature, timing, and extent of further audit procedures.

Risk assessment

- Conditions that indicate an increased risk of material misstatement
- Liquidity matters
  - — Relying heavily on bank loans
  - — Difficult obtaining surety
- Quality of earnings
  - — Changes in estimates
  - — Profits without cash flow
- Management characteristics
  - — Compensation tied to earnings
  - — Changes in senior management

Contractor estimates

- It can be argued that the contractor’s ability to make proper estimates has the most significant effect on the financial statements.
- Examples
  - — Costs to complete
  - — Contract penalties or incentives
  - — Profit from change orders
  - — Revenue from claims
  - — Allocation of equipment costs
  - — Percentage complete

Contractor's estimating skills

- Take-off — from plans and specifications
- Production — to complete when project in progress (*profit fade* or *gain*)

  Major swings in profits on individual jobs indicate a high audit risk, particularly where jobs experience *profit fade*.

  Profit fade, in other words, can represent late recognition of losses.

  A pervasive pattern of profit fade or late recognition of losses is a red flag you should watch out for.

Exercise: Group discussion — Contractor A vs. Contractor B

With a partner, or in a small group, consider the information in the group discussion of the participant manual and prepare a response to the questions posed.

- What is the total gross profit for each contractor?
- What are the gross profit percentages for each contractor?
- How are the two contractors different?

Exercise: Group discussion (continued)

	Contractor A	Contractor B
Profit from projects in progress	$50,000	$950,000
Total gross profit	$1,000,000	$1,000,000
Equity	$1,500,000	$1,500,000
Percentage of gross profit subject to an estimate	5%	95%
Percentage of equity subject to an estimate	3%	63%

As this example shows, Contractor B would generally be considered the much riskier client, even though at first glance the two appear similar. Contractor B's gross profit is "softer," less certain and subject to estimate and risk. Note also that this type of analytical procedure can be easily performed using amounts taken from the client's trial balance.

Risk assessment

- As a review, this is the audit risk (AR) model equation:

$$AR = RMM \times DR, \text{ where } RMM = IR \times CR$$

- Audit objectives and assertions
- Balance sheet approach is not sufficient. For the contract-related accounts you have to test the transactions; you have to audit the contracts.

Contract risk factors: Phase 1

- Review schedule of uncompleted jobs
  - Percent complete
  - Size of project
    - Larger projects = larger risk
- A scan of the contracts in progress schedule will identify large jobs or those that fall between 25% and 90% complete that may be high risk. These pass through the filter to phase 2.

Contract risk factors: Phase 2

- Make inquiries of management
  - — Type of project — lack of expertise
  - — Timing and scheduling — longer-term increases risk
  - — Location — unfamiliarity with local practices, economy
  - — Weather — unforeseen delays
  - — Owner, investor, or both — financial difficulties may arise
  - — Subcontractors — unforeseen delays, errors
  - — Bid spread — larger spread, improper planning

Contract risk factors: Phase 3

- Obtain detailed information
  - — Profit fade
  - — Underbilling
  - — Type of contract
  - — Claims

The exhibit “Identifying high-risk contracts,” presented in the participant manual, provides a simple flow chart for identifying high-risk contracts.

The “Assessing risk of individual contracts” table, also in the manual, presents the risks associated with contracts in each of the three phases.

Exercise: Group discussion on risk

With a partner, or in a small group, review the exhibit on “Assessing risk of individual contracts”, presented in the participant manual, and consider the following question:

Which factors are of the greatest concern for your clients?

Other areas for preliminary analysis

- General and administrative expenses
  - — Backlog gross profit
  - — Backlog gross profit to selling, general, and administrative
  - — Selling, general, and administrative expenses as a percentage of revenue
  - — Selling, general, and administrative expenses as a percentage of revenue WITHOUT officers' salaries

Other areas for preliminary analysis (continued)

- Cost of revenue analysis
  - An overall review of the revenue and cost of sales analysis among all jobs
  - An overall review of the revenue and cost of sales analysis among completed jobs
  - A review of the revenue and cost of sales for individual completed contracts

Other areas for preliminary analysis (continued)

- Property and equipment analysis
- Receivable and payables analysis
- Gross profit gain or fade analysis
- Balance sheet ratios

Other areas for preliminary analysis (continued)

Receivables and payables

- Look at trends in days outstanding
- A/R less than 70 days
- A/P less than 50 days
- Look at relationship between retainage receivable versus retainage payable and trends

Other areas for preliminary analysis (continued)

Gross profit gain or fade analysis

- A de facto required working paper in every accountant’s file and should be a part of the contractor client’s permanent file
- Allows the accountant to review how in-progress contracts were completed in the subsequent year
- Evaluates a contractor’s estimating skills whether the job is just starting out or when the job is 75% complete
- Make inquiries and follow up with testing on significant variances from one year to the next

Summary

Audit planning is performed at two general levels.

- Assess risk at the overall entity level.
- Assess risk at the relevant assertion, including the individual contract level.

This discussion provided you with a methodology and a list of factors to consider when making these assessments.

Substantive Auditing Procedures for Auditors of Construction Contractors

Learning objectives

- Identify the five key components of the contractor's audit model.
- Recall the common audit procedures to test each of the five key components of the contractor's audit model.

Exercise: Group discussion — Experience

With a partner, or in a small group, discuss your experience with performing substantive procedures and why some substantive procedures are more interesting than others. Do you have a favorite substantive procedure to perform?

Contractor audit model

The basic concept is that a contractor is audited at the contract or performance obligation level, and an auditor applies the audit risk model to the key components of the basic contract equation. The five key components are the following:

- Original contract price
- Modifications
- Cost to date
- Estimated costs to complete
- Billings

Contractor audit model (continued)

	Contract or performance obligation equation components				
Substantive procedure	Original contract amount	Modifications	Costs to date	Estimated costs to complete	Billing
Read the contract	✓	✓			
Confirmation with owner	✓	✓			✓
Review unapproved change orders		✓			
Test cost accumulation			✓	✓	
Review cost to complete				✓	
Jobsite visit		✓			✓

Reading contracts

- Look for the following:
  - Guarantees
  - Penalties and incentives
  - Cancellation and postponement provisions
  - *Force majeure* clause
  - Dates and dollars
- May read contracts at an interim date.
- Identify contracts where the risk of material misstatement is higher than acceptable.

Confirmation with owner

- Original contract price
- Total approved change orders
- Total billings and payments
- Retainage held and whether it accrues interest
- Details of any claims, back charges, or disputes
- Estimated completion date or estimated percentage complete
  - Remember that confirmations do not address all assertions equally well. The confirmation of billings and payments provides a great deal of evidence about the existence assertion but very little about valuation.

Unapproved change orders procedures

- Vouch accumulated costs to underlying invoices, time records, and other supporting documentation.
- Evaluate whether the costs relate to work within or outside the scope of the contract.
- Evaluate the nature and reasonableness of claimed damages.
- Consider the likelihood of the contractor pursuing and collecting on a claim.
- Consider the contractor’s past success in negotiating and settling similar types of claims.

Testing cost accumulation

- Testing the existence and valuation assertion of the costs to date is usually accomplished by vouching the accumulated costs to the supporting documentation.

Testing cost accumulation (continued)

- Lends itself to sampling
  - Population should be representative
  - Should include all costs
    - Materials
    - Labor
    - Direct
    - Indirect
  - Should include all projects
    - Completed
    - Uncompleted

Estimated costs to complete

- Accounting estimates are based on key factors and assumptions.
  — Focus on those key factors and assumptions that are
    - significant to the estimate,
    - sensitive to variation,
    - deviations from historical patterns, and
    - subjective and susceptible to misstatement or bias.

Estimated costs to complete (continued)

- AU-C section 540 — Use one or a combination of these approaches:
  - Review and test the process used by management to develop the estimate.
  - Develop an independent expectation of the estimate to corroborate the reasonableness of management's estimate.
  - Review subsequent events or transactions occurring before completion of field work.

Potential audit procedures

- Identify and understand significant uncertainties.
- Understand internal control structure.
- Be aware of contractor's history.
- Compare actual to budget.
- Review subsequent estimates, events, and transactions.
- Compare assumptions to terms of contract.
- Discuss with personnel.
- Look for disputes and contingencies.

Exercise: Group discussion — Jobsites

With a partner, or in a small group, discuss your experience with jobsite visits. What has been the most interesting jobsite you have been to? Did you witness anything unusual?

Objectives of jobsite visits

- To gain an understanding of the contractor's method of operations
- To determine that the job actually exists
- To obtain information from field employees that may or may not corroborate with what is represented by management
- To obtain an understanding of those elements of internal control maintained at the jobsite
- To obtain information relating to job status and problems (if any) that may be useful in other phases of the audit

Exercise: Group discussion — Substantive procedure

Working with a partner, or in a small group, consider our discussion of substantive tests and their relationship to the financial statements.

Then, place a mark in the column and row of the chart, presented in the group discussion exercise of the participant manual, indicating where a substantive procedure is an appropriate audit procedure.

Summary

We have discussed the substantive audit procedures that are unique to construction contractors. The primary objective of the discussion was to explain why certain procedures are performed.

As emphasized throughout this auditing module, the audit of a contractor is the audit of individual contracts.

As an auditor, you must gather evidence to support the assertions for each key component of the basic contract equation.

Internal Controls for the Construction Contractor

Learning objective

- Identify specific controls that are effective in mitigating the significant risks present in the construction industry.

Introduction

- Audits are currently conducted utilizing the audit risk model. As a review, this is the audit risk (AR) model equation:

$$AR = RMM \times DR, \text{ where } RMM = IR \times CR$$

- Identify potential misstatements.
- Consider factors that affect the risk of material misstatement.
- Design substantive tests.

What are internal controls?

The term *internal control* encompasses a wide range of activities within components that may be described as the

- control environment;
- the entity’s risk assessment process;
- the information system, including the related business processes relevant to financial reporting, and communication;
- control activities; and
- monitoring of controls.

Exercise: Group discussion on internal control

With a partner, or in a small group, consider this question:

- From your experience, when auditing a contractor, what are key internal controls that you would expect to see specifically when working with contractors?

Applicability to construction

- Estimating and bidding
  - The decision to take on a project or not is considered most important. (i.e., early, before any construction even takes place)
- Project admin and contract evaluation
- Jobsite accounting and controls
- Billing procedures

Applicability to construction (continued)

- Revenues
- Equipment
- Contract costs
- Payroll

Estimating and bidding

In establishing controls over bidding and estimating, the contractor should consider, in part, these items as they relate to the contract:

- The estimates should be based on contract specifications and drawings to ensure that the estimates of contract costs include all cost elements.
- Prices and quantities should be received from reliable sources.
- A recalculation of burden rates should be performed to ensure proper allocations are included, based on work being performed. This amount should be analyzed at least annually.

See the exhibit “Controls Over Bidding and Estimating” in the participant manual for additional considerations.

Project administration and contract evaluation

- Project management and contract evaluation are essential in determining the status or progress of a contract and the profitability or lack of profitability during the life of the project.
- Timely reports from the field and information derived from the accounting department are necessary for project management to make decisions that affect the project.

Jobsite accounting and controls

The assigning of accounting duties on the jobsite creates a number of internal control concerns for the contractor. Common controls include:

- Physical controls should be established over small tools, equipment, and materials to prevent loss by pilferage or unauthorized use.
- Controls over the hiring and dismissal of employees to prevent phantom employees from being used as a means for misappropriation of assets.

Jobsite accounting and controls (continued)

- Establish accounting procedures to require a specific level of management to authorize material and small tool purchases and to specify receipt of such small tools and materials.
- The accounting department should maintain effective supervision over the jobsite offices.

Billing procedures

- The billing procedures in the construction industry are unique and unlike any other industry.
- Billing procedures vary widely based upon the requirements of the contract.
- Controls and accounting procedures must be in place to facilitate the billing process and therefore safeguard and improve the entity’s cash flows.
- Procedures and controls should be in place to ensure that billings are made in accordance with the contract, and they should be designed to recognize unique contract features.

Billing procedures (continued)

- Controls should be in place to address appropriate retention provisions. Such controls should address the appropriate billings in the event the retainage is reduced after a certain percentage of the contract is complete.
- For time and material contracts, billing procedures should be in place to ensure that the contracted rates are assigned to the appropriate cost codes and the billing reflects the different work performed.
- Procedures should be in place to enact necessary filings of liens at the time of each billing to provide assurance that lien rights are protected before they expire.

Contract revenues

- The concern with contract revenues for contractors relates to providing reliable information in order to produce the proper amount and timing of contract revenue.
- The types of controls established depend on the method of revenue recognition used.
- Timely preparation and supporting documentation for the preparation of estimates under each contract in progress
- Process in order to facilitate approved change orders
- Provide for notification of contract adjustments, cancellations, or postponements

Contract revenues (continued)

- Implement the appropriate method, which the company will adopt as their revenue recognition
- Procedures in place in order to properly determine the various components to ensure accurate calculation of the percentage of completion
- Proper reconciliation of contract revenues and billings to the general ledger
- Procedures in place to accumulate reimbursable costs under cost-plus and time and material contracts

Equipment

- Equipment is one of the most significant costs a contractor can incur on a project, especially in the heavy highway industry. However, many equipment-intensive contractors have a difficult time accounting for the costs of the contractor's equipment.
- Although accounting for the costs is highly important, utilization and loss prevention can be equally or more important.
- Inventory and accountability procedures must be enforced in order to minimize losses for the contractor.

Contract costs

Reasons for comprehensive procedures and controls over contract costs, including

- controlling costs,
- determining and monitoring the status and profitability of contracts, and
- facilitating contract billings.

Contract costs (continued)

Example controls might include the following:

- Costs should be accumulated and compared to estimates determined during the bidding process.
- Costs should be categorized into appropriate and simplified categories such as labor and burden, materials, subcontracts, equipment, and so on.
- Establish an approval process through a purchase order system.
- Information flow to management to evaluate the reasonableness of the contract costs as compared to the physical determination.
- Procure subcontract costs for work performed and compare to the agreed-upon contract entered into at time contract was awarded.

Payroll

- Labor costs may be one of the most significant costs incurred by a contractor.
- Due to the commonly high turnover, the controls over payroll are essential to minimize the possibility of employee-related fraud.
- Controls over payroll are also critical for properly accounting for each particular job, phase, and type of work that is being performed by the employee.

Summary

- Many businesses can get by with a simple internal control structure; a contractor cannot.
- The uniqueness of the contractor demands more from an internal control system than most industries.
- Each contract can be represented as its own entity within an entity.

Questions, Wrap-Up, and Key Points/Lesson Review

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