

## **Discussion Topics**

- Revenue recognition changes
- Lease accounting
- Complex insurance programs
- Joint ventures
- Other emerging issues

# Revenue Recognition

## The Five Steps of Revenue Recognition

Identify the Identify the Determine the Allocate the Recognize contract(s) with transaction transaction revenue when separate the customer. performance price. price to the (or as) the obligations in performance entity satisfies the contract(s). obligations in a performance the contract(s). obligation.

# Step 2: Identify the Performance Obligations in the Contract

## Separate, or distinct, performance obligations

 Two step process to determine whether a promised good and service (or bundle of goods and services) is distinct:



- (1) consider the level of the individual good or service (i.e., the goods or services are capable of being distinct), and;
- (2) consider whether the good or service is separable from other promises in the contract (i.e., the good or service is distinct within the context of the contract)

## Step 2: Engineering and Construction (E&C) Contracts

 Judgmental area where the customer is often receiving multiple goods and services



- Example E&C project types include:
  - Design Build
  - Design Build Operate Maintain
  - Engineer, Procure, Construct (EPC)
  - Design and Construction Management
- Operation and maintenance work will typically be a separate performance obligation

## **Allocation Example – Different Margins**

		Est	
		Gross	
Estimated	Estimated	Profit	
Revenues	Costs	(Loss)	
100,000,000	95,000,000	5,000,000	
80,000,000	78,000,000	2,000,000	
20,000,000	17,000,000	3,000,000	
100,000,000	95,000,000	5,000,000	
	Revenues  100,000,000  80,000,000  20,000,000	Revenues         Costs           100,000,000         95,000,000           80,000,000         78,000,000           20,000,000         17,000,000	

Gross Profit <u>%</u>	Revenues <u>Earned</u>	Total Costs Incurred	Gross Profit (Loss)	% Complete
5.00%	36,842,105	35,000,000	1,842,105	36.84%
2.50%	20,512,821	20,000,000	512,821	25.64%
15.00%	17,647,059	15,000,000	2,647,059	88.24%
100000000	38,159,880	35,000,000		
2000000000	1,317,775	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

## **Allocation Example – Same Margin**

			Est
			Gross
Contract	Estimated	Estimated	Profit
<u>Name</u>	<u>Revenues</u>	<u>Costs</u>	(Loss)
Hospital and Parking Garage	100,000,000	95,000,000	5,000,000
Hospital	80,000,000	76,000,000	4,000,000
Parking Garage	20,000,000	19,000,000	1,000,000
Total	100,000,000	95,000,000	5,000,000

MARKARAMA				
Gross		Total	Gross	
Profit	Revenues	Costs	Profit	%
<u>%</u>	<u>Earned</u>	Incurred	(Loss)	<u>Complete</u>
5000000000				
200200000000			000000000000000000000000000000000000000	
5.00%	36,842,105	35,000,000	1,842,105	36.84%
200020000000000000000000000000000000000				
5.00%	21,052,632	20,000,000	1,052,632	26.32%
5.00%	15,789,474	15,000,000	789,474	78.95%
10000000000				
30000004000	36,842,106	35,000,000		
000000000				
30000000000	1			

## **Step 2: Other Judgement Areas**

- Self-perform work
- Contracts that include work performed at multiple locations that is not integrated



- Pre-construction
- Warranty work
  - Option to purchase separately separate performance obligation
  - Warranty for latent defects is automatically provided and cannot be separately purchased – not a separate performance obligation

© 2018 Crowe LLP

#### **Step 3: Determine the Transaction Price**

- The transaction price is based on the amount to which the entity expects to be "entitled"
- This amount is meant to reflect the amount that the entity has rights to under the present contract
- The transaction price does not include:
  - Estimates of consideration from future change orders for additional goods and services
  - Amounts collected on behalf of another party, such as sales taxes

## **Step 3: Variable Consideration Forms and Constraint**

- Common construction industry variable forms of consideration include:
  - Unpriced change orders
  - Claims
  - Incentive payments
  - Penalty provisions/liquidated damages
- Variable consideration constraint include variable consideration in the transaction price only to the extent it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved
  - Significant is relative to the cumulative revenue recognized to date on the contract



## **Step 3: Estimating Variable Consideration**

- Two methods for estimating variable consideration
  - Expected value
    - Determined by the sum of probability-weighted amounts in a range of possible consideration amounts



- Most likely amount
  - Based on the single most likely amount in a range of possible consideration amounts
- One method should be applied consistently for each type of uncertainty in contract. Different methods can be used for different types of uncertainties within a contract.

#### **Step 3: Determine the Transaction Price - Example**

#### Contract characteristics:

- A contract with a customer for fixed consideration of \$10,000,000, plus a
  performance incentive of \$336,000 for timely completion. Aggregate
  potential contract value: \$10.336 million.
- The contract is for a single performance obligation that is satisfied over time.
- The contract requires substantial completion 96 weeks after receipt of the notice to proceed.
- Performance incentives are achieved on 60% of contracts with similar characteristics.

Determine the transaction price at contract inception

#### **Step 3 : Determine the Transaction Price**

- At contract inception, variable consideration of the contract should be constrained to a value of \$0 based on the likelihood of realizing the performance incentive is only 60% probable at inception.
- Now let's move forward on the project to week 75 of contract performance where the contract is 80% complete and on track for timely completion. What should the transaction price point in time?
- Variable consideration would not be constrained at this point in time. The likelihood of receiving the performance incentive is greater than 75% at this point of completion on the project and should be included.

#### **Step 3 : Determine the Transaction Price – Example 2**

#### **Contract characteristics:**

- A contractor enters into a contract with a customer to construct a commercial building for fixed consideration of \$12 million.
- The construction of the building is a single performance obligation that is satisfied over time.
- The contract requires achievement of substantial completion 120 weeks after inception of the notice to proceed and assesses \$20,000/day in liquidated damages for each day substantial completion exceeds the target.
- Based on past experience, the contractor occurs liquidated damages on contracts according toe the probabilities in the following table.

Possible per	Possible period of delay		\$LDs/day		Total \$ LDs		ability %	Weighted \$ LDs		
Weeks	Days									
0	0	\$	20,000	\$	-		50%	\$	-	
4	28	\$	20,000	\$	560,000		5%	\$	28,000	
8	56	\$	20,000	\$	1,120,000		5%	\$	56,000	
12	84	\$	20,000	\$	1,680,000		20%	\$	336,000	
16	112	\$	20,000	\$	2,240,000		15%	\$	336,000	
20	140	\$	20,000	\$	2,800,000		3%	\$	84,000	
26	182	\$	20,000	\$	3,640,000		2%	\$	72,800	

#### **Step 3: Determine the Transaction Price**

Possible perio	od of delay	<u>\$</u> I	_Ds/day_	<u>T</u>	otal \$ LDs	Probability %	<u>Wei</u>	ghted \$ LDs	
W'eeks_	Days								,
0	0	\$	20,000	\$	-	50%	\$	-	80% probability
4	28	\$	20,000	\$	560,000	5%	\$	28,000	probaba
8	56	\$	20,000	\$	1,120,000	5%	\$	56,000	\$420,000
12	84	\$	20,000	\$	1,680,000	20%	\$	336,000	\$420,
16	112	\$	20,000	\$	2,240,000	15%	\$	336,000	
20	140	\$	20,000	\$	2,800,000	3%	\$	84,000	
26	182	\$	20,000	\$	3,640,000	2%	\$	72,800	

At contract inception, the contract value should be constrained based on when the probability of incurring liquidated damages exceeds 75%

Contract amount– probability weighted liquidated damages \$12,000,000 - \$420,000 = \$11,580,000

#### **Step 3: Impact at Adoption**

- Contractors/firms who currently estimate unpriced change orders/claims
  - Likely little impact

3

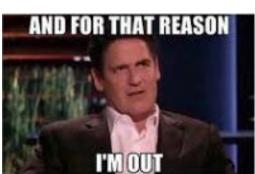
- Contractors/firms who only record change orders once signed and claims once settled
  - May see acceleration in revenue recognition
  - May have a significant amount of revenue/profit never recorded to the income statement upon adoption

## **Step 5: Uninstalled Significant Materials**

 Revenue related to the installation of significant uninstalled permanent materials will be recognized to the extent of their cost upon transfer of control to the customer



- Materials acquired for which the cost does not depict overall performance
- Current practice recognize revenue and cost once received at job-site
- New guidance
  - Exclusion from the measurement of progress
  - Inclusion only to the extent of cost
- Significant in relation to the overall performance obligation



#### **Loss Contracts**

- The provision for losses will be determined at the contract level
- If Companies make an accounting policy election, they can determine the provision for losses at the performance obligation level
  - If the election is made, it would need to be applied in the same manner to similar contracts

#### **Incremental Costs of Obtaining a Contract**

- Costs of obtaining a contract should be recognized as an asset if the costs are incremental and are expected to be recovered
- Definition Those costs that the entity would not have incurred if the contract had not been obtained
- Practical expedient these costs can be recognized as expense when incurred if the amortization period of the asset that the entity would have recognized is one year or less

#### Implementation & Transition – Two Approaches

#### **Retrospective Transition Method**

- Apply Topic 606 to all prior periods presented
- Certain practical expedients are allowed

#### **Cumulative Effect Method**

- No restatement of prior periods
- An entity can choose to apply to only contracts that are not completed contracts at date of initial application or all contracts at date of initial application
- Recognize a cumulative effect adjustment at beginning of period
- Disclose in the year of adoption the effect on current year, by line item.

© 2018 Crowe LLP

## Leases

#### **Effective Dates and Transition Requirements**

#### **Effective date**

- Public business entities (PBEs) and certain not-for-profit entities and employee benefit plans - fiscal years (including interims within) beginning after Dec. 15, 2018, including interim periods within those fiscal years
- All other entities fiscal years beginning after Dec. 15, 2019, interim periods beginning after Dec. 15, 2020. (Effective date for calendar year end of 12/31/20)
- Early application permitted for all entities.

#### **Transition**

 Lessee – require modified retrospective for capital and operating leases existing at or entered into after the beginning of the earliest comparative period presented (no required transition for leases that expired before application).

© 2018 Crowe LLP

#### **Lessee Accounting Model** – How to Determine Classification

#### Criteria

- Five classification criteria (ASC 842-10-25-2) similar to existing GAAP
- No bright line thresholds
- Largely based on whether lessee obtains control of the underlying asset rather than control over merely <u>the use of</u> the underlying lease asset
- "Reasonably certain to exercise"
  - Lease term includes periods subject to extension options if the lessee is
     Reasonably Certain to exercise that option

#### 5 Criteria For Lease Classification

#### Lease classification:

- The lease transfers ownership of the underlying asset to the lessee by the end of the lease term.
- The lease grants the lessee an option to purchase the underlying asset that the lessee is reasonably certain to exercise.
- The lease term is for a major part of the remaining economic life of the underlying asset. This criterion is not applicable for leases that commence at or near the end of the underlying asset's economic life.
- The present value of the sum of the lease payments and any residual value guaranteed by the lessee that is not already included in the lease payments equals or exceeds substantially all of the fair value of the underlying asset.
- The underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. A lessee classifies a lease as an operating lease when it does not meet any of the criteria above.

© 2018 Crowe LLP

## What Are The Core Principles Of The New Standard?

 Hang substantially all leases > 12 months on the balance sheet

• Disclose, disclose, disclose



#### **Lessee Accounting Model** – Measurement and Presentation

	Finance Lease	Operating Lease
Has control of the lease asset passed to the lessee?	Yes	No
Balance sheet	Right-of-use asset Lease liability	Right-of-use asset Lease liability
Income statement (characterization)	Interest expense Amortization expense	Lease expense (including initial direct costs)
Pattern of expense	Front-loaded	Straight-line
Cash flow statement	Operating - cash paid for interest Financing - cash paid for principal	Operating - cash paid for lease payments

#### Let's Walk Through a Hypothetical Lease...

Scott's Contracting, a lessee, entered into a four year lease of a commercial office building. At lease commencement, management of Scott's Contracting determined that the lease should be classified as an operating lease because the lease did not meet any of the five criteria to be classified as a finance lease.

- The lease includes the following annual lease payments due at the end of each year:
  - Year 1 \$14,000
  - Year 2 \$14,000
  - Year 3 \$14,000
  - Year 4 \$14,000
- There are no extension periods, no options to purchase, and no other lease incentives from the lessor. Additionally, there were no initial direct costs.
- As the rate implicit in the lease could not be determined, Scott's Contracting used a discount rate of 6.00% which is its incremental borrowing rate.

#### Let's Walk Through a Hypothetical Lease...

# At the commencement of the lease, Scott's Contracting would initially measure and record the right-of-use asset and lease liability as follows:

	<u>Payments</u>					
Year 1	\$ 14,000	Dieht of	Φ.	<u>Debit</u>		Credit
Year 2	14,000	Right of use asset Lease liability	\$	48,500	\$	48,500
Year 3	14,000	20000			•	.0,000
Year 4	<u> 14,000</u>					
Total	\$ 56,000					

#### PV of lease payments at the discount rate of 6.00% = \$48,500

• The initial measurement of the lease liability and right-of-use asset was determined based on the present value of the lease payments using the 6.00% discount rate.

	<u>Rent</u>	PV Factor	<u>Amount</u>
Year 1	14,000.00	0.94339623	\$13,207.55
Year 2	14,000.00	0.88999644	12,459.95
Year 3	14,000.00	0.83961928	11,754.67
Year 4	14,000.00	0.79209366	11,089.31
	56,000.00		48,511.48
		Say	\$48,500

#### Let's Walk through a Hypothetical Lease...

## Scott's Contracting would then record the following entries in Year 1 of the lease:

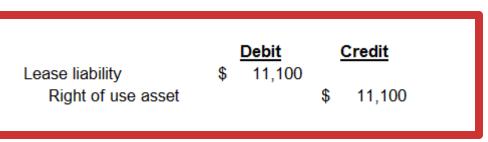
 Debit
 Credit

 Lease expense
 \$ 14,000

 Cash
 \$ 14,000

To record lease expense (straight-line lease expense)

	<u>Payments</u>
Year 2	14,000
Year 3	14,000
Year 4	14,000
Total	\$ 42,000



 To adjust the lease liability to the present value of the remaining lease payments at the end of Year 1, with an offset to the right-of-use asset. The adjustment of \$11,100 is calculated as the initially recognized lease liability (\$48,500) less the present value of remaining lease payments (\$37,400) at the end of Year 1.

	Rent	PV Factor	Amount
Year 2	14,000.00	0.94339623	13,207.55
Year 3	14,000.00	0.88999644	12,459.95
Year 4	14,000.00	0.83961928	11,754.67
		_	
	42,000.00		37,422
		Say	\$37,400

## Let's Walk Through a Hypothetical Lease...

A summary of the lease contract's accounting (assuming no changes due to reassessment, lease modification, or impairment) is as follows:

	Initial	,	Year 1	Year 2	Year 3	,	Year 4
Cash lease payments		\$	14,000	\$ 14,000	\$ 14,000	\$	14,000
Income statement Lease Expense (straight-line)		\$	14,000	\$ 14,000	\$ 14,000	\$	14,000
Balance sheet Lease liabilty	\$ (48,500)	\$	(37,400)	\$ (25,700)	\$ (13,200)		-
Right of use asset	\$ 48,500	\$	37,400	\$ 25,700	\$ 13,200		_

## **Example Balance Sheet**

		Lease	
	Current Approach	Standard	Revised Approach
Cash	\$ 30,000,000		30,000,000
Investments	6,000,000		6,000,000
Accounts receivable	214,000,000		214,000,000
CIE	35,000,000		35,000,000
Inventory	1,000,000		1,000,000
Other current assets	15,000,000		15,000,000
Total current assets	301,000,000		301,000,000
PP&E	10,000,000		10,000,000
Right of Use Asset	-	32,000,000	32,000,000
Other long-term assets	40,000,000		40,000,000
Total assets	\$ 351,000,000		\$ 383,000,000

## **Example Balance Sheet**

Line of credit	\$ 5,000,000		5,000,000
Accounts payable	130,000,000		130,000,000
BIE	70,000,000		70,000,000
Current portion of lease liability	-	7,000,000	7,000,000
Current portion of LTD	6,000,000		6,000,000
Other current liabilities	40,000,000		40,000,000
Total current liabilities	251,000,000		258,000,000
			-
Long-term liabilities	20,000,000		20,000,000
Lease liability	-	25,000,000	25,000,000
			-
Equity	80,000,000		80,000,000
Total liabilities and equity	\$ 351,000,000		\$ 383,000,000

## **Impact on Surety Industry**

	Current Approach	Revised Approach
Working Capital	50,000,000	43,000,000
Total liabilities to Equity	3.39	3.79
Bond capacity at 10x	500,000,000	430,000,000
Bond capacity at 20x	1,000,000,000	860,000,000

#### **Impact on Banking Industry**

#### Debt Covenants

- In some agreements, "debt" is defined as all liabilities under GAAP, so the new ASU will have an impact.
  - Some potential debt covenants impacted (assumes the term "debt" means all liabilities) are as follows:
    - Debt to Cash Flow
    - Leverage Ratio
    - Current Ratio
    - Debt to EBITDA
    - Cash flow to debt ratio



# Complex Insurance Programs

#### **Discussion Topics**

- How did we get here?
- Types of complex insurance programs
- Accounting, processes and controls
- Internal management and planning
- Q&A

# 20 Years Ago vs. Today



# **Lines of Coverage**

- Workers compensation
- General liability
- Health
- Excess/umbrella liability
- Builders risk
- Pollution liability
- Professional liability
- Auto
- Subcontractor default



# Types of Coverages

- Traditional Full Risk Coverage
- High deductible plans or Self-Insured Retention (SIR)
- Owner controlled insurance programs (OCIP)
- Contractor controlled insurance programs (CCIP)
- Subcontractor Default Insurance (SDI)
- Captives

- Control and manage costs
- Provide additional profitability
- Increased focus on safety
- Customer considerations
- Insurance company vs. construction company?

- Audience Survey
  - Types of contractors?
  - How many have complex insurance programs?
  - CCIP, OCIP, SDI, Captives, High Deductible?



#### **High Deductible Plans**

#### **Accounting**

- Prepaid / Accrual
- Payroll based premium adjustments
- Loss reserves
  - Known Claims
  - •IBNR
  - Lag period
  - Under / Over deductible
    - Single and total limits

- Claims report
  - 3rd party administrator
  - Actuarial reports

#### **High Deductible Plans**

# Internal Planning and Management

- Regular claim review and related meetings
  - Managing claims and exposures
- Internal supervision and administration of the program
  - Who is involved?
- Projecting reserve levels and impact to financials
- Cash flow considerations
- Letter of credit requirements
- Determining deductible limits. How much risk am I willing to take?
- When to relieve old claims? Timing?

# **Accounting**

- Overview of a CCIP
  - GC Controlled
  - Types of coverages included
  - Program types
    - Single project vs a rolling project program (3 year commitment at a price)
- Charge the job for internal insurance (i.e. premiums)
  - Predetermined rate / premium
  - Accounting
    - Debit: job cost income statement
    - Credit: insurance revenue or loss fund liability

# **Accounting**

- Set up cost center
  - Generally located in liability section
  - Revenue internal insurance premiums
  - Costs
    - Claims paid and accrued
    - Insurance costs re-insurance premiums and agent fees
    - Safety costs Wages, supplies, etc.
    - Admin costs bank fees (LOC and escrow), TPA, etc.
    - Contingency

#### **Accounting**

- Recognizing CCIP losses and income
  - Losses as soon as their known
  - Excess premiums over costs recognized into income
    - Determine exposure period
    - Actuarial determined
    - Methodical and reasonable
- Impact to % complete calculation
  - Accelerates POC
  - Material impact? If so, adjust accordingly.

#### Internal Planning and Management

- How to sell to the customer and price it
- Regular claim review and related meetings
  - Managing claims and exposures
- Internal supervision and administration of the program
  - Who is involved?
- Safety management
- Projecting reserve levels and impact to financials
- Cash flow considerations
- Letter of credit requirements
- Determining deductible limits. How much risk am I willing to take?
- Impact to company valuation
- Contract agreements
  - Subcontract
  - Owner

#### **Subcontract Default Insurance**

# **Accounting**

- Overview of SDI insurance
  - Nature of the coverage
  - Providers Zurich, XL, Arch, Catlin
  - Structure: Two components: self retained (deductible) and fixed insurance charge or premium
- Initial Accounting
  - Debit: job cost income statement (both portions)
  - Credit: Cash paid for premiums paid to provider (both portions)
  - Debit: SDI Deposit account (deductible potion)
  - Credit: insurance revenue or loss fund liability

#### **Subcontract Default Insurance**

#### **Accounting**

- Claims against the deductible charged to SDI loss reserve if balance sufficient otherwise take loss as soon as known
- Recognizing excess deductible related amounts collected in excess of claims paid.
  - Determine exposure period by stature
  - Determine historical or industry claim trends
  - Utilize actuarial firm
  - Methodical and reasonable
  - Amortize or charge to insurance income accordingly
- Impact to % complete calculation
  - Accelerates POC by the amount charged for the deductible portion
  - Material impact? If so, adjust accordingly.

#### **Subcontract Default Insurance**

# Internal Planning and Management

- How to sell to the customer and price it
- Prequalification program and monitoring sub performance
- Managing claims
- Internal supervision and administration of the program
  - Who is involved?
- Projecting reserve levels and impact to financials
- Cash flow considerations
- Letter of credit requirements
- Determining deductible limits. How much risk am I willing to take?
- Impact to company valuation
- Contract agreements
  - Subcontract
  - Owner

# Joint Venture Accounting and Best Practices

#### **Joint Ventures**

- Discussion Topics
  - Why considering a JV?
  - Setting up the JV
  - During the construction period
  - Wrapping things up
  - Q&A

# Why Considering a JV?

- Spread risk
- Bonding capacity
- Combine specialized capabilities
- Expand market with a partner more experienced in the new market and local trades
- Gain experience on larger projects
- MBE / DBE requirements
- Increase bidding accuracy by working together

# Why Considering a JV?

- Due diligence on your JV partner
  - Financial
  - Capacity
  - Capability
  - Culture
  - Talk to past JV partners
  - Legal review
  - Checklist

# **Setting Up the JV**

- Entity selection
- Operating agreement
- Corporate governance
- Transaction and signing authority
- Accounting related
  - Financial statements
  - Job costing / ECTC process
  - Internal billing process by the JV members
  - Accounting controls and processes
  - Tax elections

# **Setting Up the JV**

- Risk management
  - Dispute / Claim management
  - Insurance selection
- Internal billings
- Accounting methods at the partner level
  - Full consolidation
  - Proportional consolidation
  - Equity
  - Prorata
  - Cost

# **During the Construction Period**

- Proactive involvement
- Regular JV meetings
- Billing review
- ECTC process
- Meetings with the owner
- Internal process review

# **Wrapping Things Up**

- Detailed ECTC review at 80% complete
- Sub close out
- Insurance reserve settlement
- Final profit allocations
- Tax returns

# Other Emerging Topics

#### **Other Emerging Topics**

- Acquisitions
  - No backlog or customer lists under PCC rules
  - Profit interest value and treatment
- Related party leases accounting alternative
- Stock Appreciation Rights / Phantom Plans
- Available for sale securities
- ESOP Accounting
- Other?



# **Thank You**



#### Jon Zeiler



Phone +1 630 575 4237



Jon.zeiler@crowe.com



#### **Scott Schmucker**



Phone +1 574 389 2536



scott.schmucker@crowe.com