

# Agenda

*Presented by Pete Fowler, Michael Villalba and Ron Svarc*

## Understanding & Evaluating Construction Cost Estimates

### Introduction

#### How Do You Know?

Time spent on summary & analysis  
Estimate summary  
Level 5 estimating analysis  
Keep asking “why?” or “how do you know?”  
Show your work!  
Case study

#### Detailed Analysis

|                                   |                     |
|-----------------------------------|---------------------|
| Thinking scientifically           | Estimating errors   |
| Estimating basics                 | Labor               |
| Indirect construction costs       | Other project costs |
| If you can't explain it simply... |                     |

#### Burden

|                        |                     |
|------------------------|---------------------|
| What's burden include? | Burden calculations |
| Why do we care?        | Fun with numbers    |

#### Match Game

|                              |                 |
|------------------------------|-----------------|
| Analyzing multiple estimates | A sensible list |
| “Normalizing”                | Case study      |

#### Xactimate

|                              |               |
|------------------------------|---------------|
| Insurance industry standards | Pros          |
| Cons                         | PFCS position |

## Budgeting & Estimating for Construction, Maintenance, Repairs & Claims

#### Order of Magnitude (PFCS Level 1)

|                                       |                        |
|---------------------------------------|------------------------|
| Case study: Otto's outhouse           | 10 steps: level 1      |
| Case study: multi-family residential  | Case study: commercial |
| Case study: your room using Uniformat |                        |

#### Putting It All Together

|                               |                     |
|-------------------------------|---------------------|
| 10-steps summary              | 5 levels – 10 steps |
| Decide on the level of detail | A sensible list     |
| Estimate set-up               | Relating the parts  |
| Resources                     | Estimate backup     |

#### Conceptual & Preliminary (PFCS Levels 2-3)

|                               |                              |
|-------------------------------|------------------------------|
| 10 steps: level 2, level 3    | Construction cost flow chart |
| Using the estimate components | Estimate details             |
| Quantity take off (QTO)       | Case study: Otto's outhouse  |

#### Detailed & Bid/Construction/Trial (PFCS Levels 4-5)

|                                  |                           |
|----------------------------------|---------------------------|
| 10 steps: level 4, level 5       | Detailed estimating       |
| Refine the estimate: many passes | Peer review               |
| Case study: Thompson gardens     | Case study: Cuban's manor |

#### Conclusion

|                                      |                         |
|--------------------------------------|-------------------------|
| Estimating is a skill and profession | Estimator certification |
| Learning objectives                  | Back-up material        |
| Homework                             |                         |

## Construction Cost Estimating

Portland, OR - Friday, January 18, 2019

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# Learning Objectives

### You'll be able to:

**Understand** the principles and tools of estimating.

**Explore** the process of estimating.

**Budget** and estimate for construction, maintenance, repairs and claims.

**Examine** different estimate levels, including order of magnitude, conceptual, preliminary, detailed and bid/construction.

**Consider** case studies and examine real world examples of construction cost estimates.



# Construction Cost Estimating

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**Understand** how to analyze and summarize construction cost estimates

**Budget** and estimate for construction, maintenance, repairs and claims

**Discuss** the power and dangers of Xactimate

**Review** case studies and examine real world examples of construction cost estimates

## Continuing Education Credits

#### Architects

6.5 HSW CE Hours (CEH)  
6.5 AIA HSW Learning Units

#### Contractors

6.5 Commercial CE Hours

#### Professional Engineers

6.5 PDHs



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# Faculty

**Pete Fowler**, *Professional Cost Estimator, Pete Fowler Construction Services, Inc.*  
Mr. Fowler is a construction consultant, professional cost estimator, and president of Pete Fowler Construction Services, Inc. (PFCS), a licensed general building contractor in California and Oregon. He received a B.S. degree in Construction Management from California State University, Chico. He has held certifications from the American Architectural Manufacturers Association (AAMA), the American Society of Professional Estimators (ASPE), the International Conference of Building Officials (ICBO), and others. Mr. Fowler has published articles in national magazines, and has been invited to speak by the most important groups in the building industry (AAMA, APRA, ASPE, ASTM, BETEC, CAI, ICC, NIBS, RCI, etc.). He also has experience with successful expert witness testimony, including in Federal Court.

**Michael Villalba**, *Construction Consultant, Pete Fowler Construction Services, Inc.*  
Mr. Villalba is an expert construction consultant and cost estimator with experience in virtually every role in the contracting and building industry including laborer, carpenter, superintendent, project manager, estimator, quality control inspector, operations manager, and owner of a general building contracting firm. His experience is wide and deep with project types including single-family residences, multi-family projects, mixed-use developments, and commercial, institutional, industrial, low-rise, mid-rise and high-rise construction. Mr. Villalba serves clients who are property owners and managers, developers and contractors, product manufacturers and suppliers, insurers and lawyers.

# Seminar Information

**Doubletree Hotel Portland**  
1000 N.E. Multnomah Street  
Portland, OR 97232  
(503) 281-6111

**Tuition**  
**\$279** for individual registration  
**\$259** for three or more registrants from the same company at the same time.

**Included with your registration:**  
*Complimentary continental breakfast and printed seminar manual.*  
**Receive a reduced tuition rate of \$101** by registering to be our on-site coordinator for the day. For availability and job description, please visit [www.halfmoonseminars.org](http://www.halfmoonseminars.org).

**How to Register**

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

**Cancellations:** Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

**Ron Svarc**, *Professional Cost Estimator, Accurate Consultant Services, LLC*  
Mr. Svarc has over 45 years of construction estimating and management experience in all types of residential, public, government, and commercial construction technology. As a chief and senior estimator, Mr. Svarc has estimated projects from \$30,000 to \$365,000,000 in the areas of residential, industrial, and commercial buildings; private and public works; churches; theme parks; reservoirs; schools; hospitals; medical office buildings; multi-use family dwellings; hotels; resorts; fire damage and athletic fields. As a designated expert with specialized expertise in construction, cost estimating, project management and scheduling, he provides unique qualifications for the analysis and interpretation of in-situ conditions and standard of care criteria. Additionally, Mr. Svarc prepares investigative protocols for existing conditions analysis, intent of design documents and subjective application of local building ordinances, as well as national building code criteria. As a construction management professional, he has a working knowledge of building component performance based on building type, systems interface criteria, and failure diagnosis. Mr. Svarc is proficient in all types of construction scheduling, including the critical path method and fast track scheduling. Mr. Svarc has background and experience in forensic analysis, preparation of repair methodologies and recommendations, and also the cost of repair associated with remediation of construction defects. He prepares detailed technical analysis of findings, interpretation of existing conditions, and develops appropriate repair scopes and estimates.

## Continuing Education Credit Information

This seminar is open to the public and offers 6.5 HSW continuing education hours to architects and 6.5 PDHs to professional engineers in all states. This seminar also offers 6.5 continuing education hours to Oregon commercial contractors. Educators and courses are not subject to preapproval in Oregon.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is an approved Florida architect continuing education provider and is deemed an approved continuing education sponsor for New York architects.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

# Additional Learning

## Webinar Series

- Deep Foundations**
- **Deep Foundation Site Evaluation**  
Weds., Dec. 12, 2018, 11:00 AM - 12:00 PM CST
  - **Overview of Deep Foundation**  
Weds., Dec. 12, 2018, 12:30 - 2:00 PM CST
  - **Deep Foundation Pile Design**  
Thurs., Dec. 13, 2018, 11:00 AM - 12:30 PM CST
  - **Deep Foundation Installation and Testing**  
Thurs., Dec. 13, 2018, 1:00 - 2:00 PM CST

## Stormwater Management Systems

- **Stormwater Infrastructure Practices**  
Weds., Dec. 19, 2018, 11:00 AM - 1:00 PM CST
- **Infiltration Management Techniques**  
Thurs., Dec. 20, 2018, 11:00 AM - 1:00 PM CST

For more information visit:  
[www.halfmoonseminars.org/webinars/](http://www.halfmoonseminars.org/webinars/)

## Can't Attend? Order the Manual and the Audio from the Live Seminar as a Self-Study Package!

An audio recording of this seminar is available for \$289. Allow four weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

# Registration

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| How to Register                                                                          |              | Registrant Information                                                                                                                                              |
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| <b>Phone:</b><br>715-835-5900                                                            |              | <b>Additional Registrants:</b>                                                                                                                                      |
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|                                                                                          |              | Phone: _____                                                                                                                                                        |
|                                                                                          |              | Name: _____                                                                                                                                                         |
|                                                                                          |              | Occupation: _____                                                                                                                                                   |
|                                                                                          |              | Email: _____                                                                                                                                                        |
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| <b>Mail:</b><br>HalfMoon Education Inc.,<br>PO Box 278, Altoona, WI<br>54720-0278        |              | Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred. |
| <b>Complete the entire form.</b> Attach duplicates if necessary.                         |              | ( )  I need special accommodations. Please contact me.                                                                                                              |

## Tuition

- ( ) **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.
- ( ) **I am not attending.** Please send me the self-study package for **\$289.00**.
- ☐ Downloadable MP3 Audio/PDF Manual
- ☐ CD/Manual Package
- (Please allow four weeks from seminar date for delivery)

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