<table>
<tr><td colspan="3" align="center">ICEAA Board of Director's Meeting
0900 – 1600 | Saturday, February 9, 2019

MCR Offices - McLean, VA
AGENDA
as of January 28, 2019</td><td align="center">Strategic Plan Goal
Tech = Technical Excellence
Coll = Collaboration
Relev = Relevance</td></tr>
</table>

Time	Agenda Item	Leader	
8:30	Gather for Continental Breakfast		
9:00	Welcome, Quorum Count, and Introductions	Paul Marston	
9:15	Secretary Report **Vote:** Approve June 2018 Minutes	Greg Kiviat	
9:30	ICEAA Training in the UK, Relationship with SCAF	Sanath Rajagopal	Tech, Coll, Relev
10:00	Treasurer Report **Vote:** Approve Treasurers Report	Bob Hunt	
10:15	ICEAA Business Office Report	Megan Jones	Coll, Relev
10:30	Break		
10:45	2019 Workshop Update	Christina Snyder	Tech, Coll, Relev
11:00	Membership Outreach Committee Update	Ellie Bassett	Coll, Relev
11:15	Establishing an OEM (Manufacturing) Outreach Committee	Greg Kiviat	Tech, Coll, Relev
11:30	ICEAA Strategic Plan Review	Rick Collins	Tech, Coll, Relev
12:00	Lunch & break		
12:30	PCEA/CCEA Certification Update	Peter Andrejev	Tech, Coll, Relev
12:45	CEBoK Update Update	Paul Marston	Tech, Coll, Relev
1:00	Software Specialty Certification/Software CEBoK Update	Brian Glauser	Tech, Coll, Relev
1:15	2019-2021 Board Nominating Committee Update	Brian Glauser	Coll, Relev
1:30	Questions/Comments on Chapter and Region Reports		Coll
1:45	Review November 2018 Board Action Summary	Megan Jones	
2:00	Plan Next Meeting & Adjourn	Paul Marston	

ICEAA Board of Directors Meeting

November 3, 2018 | McLean, VA

DRAFT MINUTES as of November 8, 2018

Voting Attendees

Present: Arlene Minkiewicz, Bob Hunt, Michael Thompson, Paul Marston

Virtual: Andy Prince, Brian Glauser, Erin Barkel, John Deem, Sanath Rajagopal (partial), Tomeka Williams (partial), Rich Harwin, Rick Collins (partial).

Proxies assigned: Britt Staley for Rick Collins, Brian Glauser for Sanath Rajagopal.

Non-voting Attendees:

Present: Britt Staley, Peter Andrejev

Virtual: Christina Snyder, Ellie Bassett, Mary Rowan, Peter Weltman

Welcome, quorum count, introductions: Paul Marston

As of 9:03, quorum was not established. After emails requesting proxy assignments, the quorum is established at 9:06. Board members are reminded to assign their proxy in advance should they not be available for a meeting.

Strategic Plan Review: Rick Collins

Assuming everyone read the pre-read, Rick announces he will only speak to and present the final 2 of 12 slides. He and the board members who volunteered to be a part of the Strategic Plan Review Committee have been approaching the strategic plan as a means to grow the community of practice and therefore the association. Rick and his team think we need to make an all-out push to energize current membership base and lead to the organization on the forefront of progress in areas that are challenges to the community, but also to explore opportunities for the association to grow as far as reputation and relevance.

Rick asks Paul in particular, whether he disagrees with any of the statements on [slide 11]. Paul agrees with all, adding that big question is whether what we're providing now is enough to keep an association going, and how can we provide more value to our members. Paul agrees the current state of the association can keep us in business for a while but doesn't assure growth, and if we don't invest in CEBoK it will fall apart and die.

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Peter Andrejev asks, what do cost estimators really need? While Rick's slide says information, knowledge and ideas, what estimators really need is data. Peter A. suggests we add data as a value we can provide, and that we should become a source for non-confidential data, such as RS Means. Megan warns that RS Means is a big company that spends all of their effort and considerably more resources on creating data, and that would fundamentally change the direction of the association. Brian agrees to add data as a point of value for ICEAA membership, even if we don't yet know how to provide it. He mentions he has had discussions with another association, ISBSG which has some data they would be willing to partner with us to provide our membership, and something for ICEAA to look into. All agree it's a good idea and something to add to the list.

Rick understands that we haven't finalized the strategic plan, but wants to start recommending objectives that had been in the original strategic plan since 2013, and suggests getting started on them.

Paul agrees with the goal of increasing the means for our community to exchange ideas, and that we need more help from someone with more subject matter expertise in the International Business Office. Paul likes the idea of paying someone to help us accomplish goals, but we should make concrete plans for what those goals we want accomplished are. Megan agrees, and suggests starting by paying someone on a per-project basis rather than a set amount of hours per week.

Paul says then again, we need to get CEBoK done, paying someone $75K a year would get lots of CEBoK done. Britt agrees also, and says that she thinks that getting the membership involved in the things we have to offer is the job of the Chapter President. Peter says yes, those chapter presidents that are already involved are doing this, but a new audience. Erin agrees that we need someone to generate content.

Rick has to sign off the call, but Paul wants to continue the conversation. Peter A. believes some of these ideas would generate revenue, Brian agrees. Paul agrees too, but let's figure out what it would be and what it could mean before we commit to spending on it.

Andy suggests taking what Rick said as a proposal, good food for thought, but that the board should be able to make changes as necessary to make it work. John D. suggests we do a risk/cause analysis so we can create a problem statement, so we need to determine what we can do to get things going. Brian thinks everyone should look more at the strategic plan provided in the read ahead, because there's lots of good ideas in it, and adds that we need to update the strategic plan, review the SWOT analysis, and then agree to a plan, which may or may not include the suggestions discussed today.

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Paul agrees the strategic plan committee should continue their work, with the advice that strategic plan focus on high-level ideas and identify big issue ideas that the association needs to address. While he acknowledges the counter-argument of how not having actionable items makes progress immeasurable, since the ICEAA leadership changes every 2 years, each new board may have new ways to achieve the high-level goals within the framework rather than be constricted by a previous board's mandate

Action: Strategic Plan committee should continue their work developing ideas and recommended edits to the strategic plan, present at the next board meeting.

Secretary Report: Paul Marston

No comments/corrections were received on the June 2018 minutes in the 4 months they have been available for comment. Megan mentions she has added a list of "key votes/actions" to the leadership page to more easily identify when significant decisions were made.

Vote: Motion is raised to approve the Secretary Report; no further discussion is requested. Seconded and passed.

Treasurer Report: Bob Hunt

Bob concludes that we can invest between $100-200K in the association over the next year without impacting operations. This is exclusive of any additional ongoing expenses the board may agree to incur, but a general budget of what funds are available with which we can finance new ideas and initiatives.

Overall, ICEAA's financial situation is good. Investments remain strong, profit & loss statement better than anticipated. Paul remembers when CEBoK earned the association upwards of $50,000 per year; the longer we wait to update it, the longer we're not seeing those kinds of revenues.

Britt asks about the increase in journal pricing. Megan explains that ICEAA had agreed to provide the *Journal* editor Ricardo Valerdi with an annual stipend that they had failed to remit the past few years, and the increase vs. expectation is making up those missed years.

Bob shows the monthly spending charts requested in his June action item. The details of the charts show we're self-sustaining, and believes the improvement of the economy and

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increase in national security budgets should positively impact membership and Workshop attendance.

Megan reminds the group that even though we're a non-profit, we should still be trying to make money; non-profit means we have to invest that money back in the association. So the more money we make, the better services we can provide, which makes us more money, which gets us better value…

Vote: Motion is raised to approve the Treasurer Report; no further discussion is requested. Seconded and passed.

ICEAA Training in the UK, Relationship with SCAF   Sanath Rajagopal

Sanath was not yet on the phone due to a family emergency, but Paul summarizes that SCAF (UK cost association) considers themselves an independent but complimentary organization to ICEAA. Sanath is working to get SCAF to agree to merge with ICEAA. While SCAF has been resistant to the idea, progress is being made, and in the meantime, our relationship remains strong and mutually beneficial.

Sanath joined the call just in time to hear Paul's summary, and confirms everything said. He is proposing a method of how to provide ICEAA training for SCAF members, and will send an update on SCAF after their committee meeting next week.

International Business Office Report: Megan Jones

Megan presents IBO slides, happy to announce the increase in membership seen in June has been maintained.

Positive news for the 2019 budget: the ICEAA Canada Workshop is being moved to September next year to reduce the conflict with the ICEAA conference. This will allow the IBO to support management and logistics of the Canada Workshop, for which the IBO will collect $20,000. Erin applauds the hard work the IBO puts into meetings and is looking forward to working together again. Erin adds that having the two workshops on the opposite ends of the calendar should increase attendance for both.

2021 Workshop location: sent RFPs to 8 cities, got 3 good responses from Indianapolis and 5 good responses from Minneapolis. Having heard good reviews of Minneapolis from both

friends and meeting-planner colleagues, Megan is headed there next week to look at and determine the host hotel.

CCEA Finishing School: Having collected $2,400 in registration fees, ICEAA made about $2,000 in revenue, exclusive of the additional CEBoK copies and exam fees purchased by the attendees. Britt ran into an attendee who had nothing but good things to say about the Finishing School and suggests we try to compare the exam results of those who attended the Finishing School or ICEAA Workshop vs. those who studied independently.

Megan commends Remmie Arnold and the team at Technomics for putting together exactly the kind of program we wanted, and in such a format that will make it easy to put on at different locations across the country and the world. We will be asking for as much feedback from the attendees as we can get for improvements, but are comfortable calling this first instance a success.

Certification Report   Peter Andrejev

Peter A. presents slides. 50% of the ICEAA membership are CCEAs and 65% are either CCEA or PCEA, which represents a high point of certification numbers that exceeds industry standards. While exam pass rates are up, the staggered timing of recertification makes it difficult to calculate a recertification rate. Peter anticipates the coming software certification will also improve our overall statistics.

CCEA Retiree status: the discussion of the "increased interest" in providing a retiree status for CCEAs should be tempered knowing that the increase is from 1 person to 4, so time and effort on it should remain proportional. All agree it is a good idea but none want to advertise this as a "new" certification, but allow for those who are already certified to let them continue the designation into retirement. The IBO will not advertise it as a new certification, but will add a description of it as fine print on the recertification application.

Proposed "Retired CCEAs" Policy

Peter chose to call this CCEA-Retired vs. CCEA-Emeritus, as we recently adopted an Emeritus status for membership.

The main caveat for CCEA-Retired is once someone chooses to take on the CCEA-R, they can't go back to a regular CCEA. Erin supports the ban on "double-dipping," saying it is common practice with other organizations, and that if someone
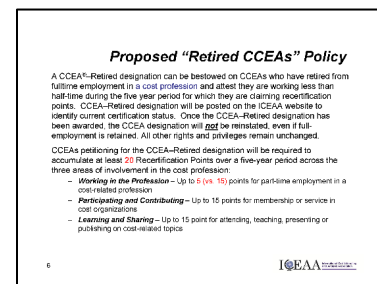
were to leave the industry for a long time then come back, they would need to re-certify since their knowledge would be outdated.

Peter presents the suggestion on the slide that outlines the policy while allowing the IBO some freedom to screen potential Retired CCEAs. Britt proposes adding "in the cost profession" as indicated in the first sentence to clarify. No objections.

The board decides not to formally vote on it, but no objections raised, and gives their general approval to move forward with the CCEA-R designation.

Action: IBO to a line to the recertification application describing the CCEA-R status.

Membership Outreach Committee Update   Ellie Basset

Ellie plays the "What is Cost Estimating" video now available on the ICEAA website and YouTube channel, giving special kudos to Chelsea for the video editing. This and the other videos were filmed in Phoenix with little to no preparation, but with the advantage of experience, we will better organize our filming in Tampa. Paul says now that we have videos giving an understanding of estimating, recommends asking members with various job backgrounds to discuss how they use estimating in their careers.

The Membership Outreach Committee identified the highest-tier distinction between our target demographics: those who are already in the industry, and those, especially college students, who don't know anything about it. The Cost Estimating & Analysis Cycle slides included in the pre-read are what they're calling the "College Version:" the result of a months-long effort to describe cost estimating in general terms that people who are unfamiliar with the industry jargon will understand. John D. has presented the College Version to the Lone Star Chapter to positive feedback, and Ellie plans to present them to the New England Chapter later this year. Now that the College Version is done, the committee will develop a new version that includes more detail and terms potential members already in the industry.

Andy says the cycle presented looks like how a big contractor does business, but isn't the cycle the government uses, nor what NASA uses. Have we looked at what other people do? The committee has looked at different approaches, and though it may not be precisely how every different group does business, the College Version is intended to be broad and general in order to introduce the concept of cost estimating to new audiences, especially college kids, who have never heard of it.

Accepting suggestions for ideas on what to talk about in the next round of videos, people who want to be on the calls, and want to help develop more presentations.

Action: All are encouraged to send their comments, thoughts, or suggestions on ways to improve the cost estimating cycle slides or request to attend an upcoming Membership Outreach Committee meeting.

<u>CEBoK Update, Comments on Editing Project RFP</u>   Paul Marston

No comments or suggestions were received on the CEBoK Editing RFP that was distributed in the pre-read. The CEBoK content in the wiki we have at the moment was copied from our PowerPoints by an intern at Technomics with little to no technical expertise. Therefore we need to clean up the language before we release it to the public or have it translated into other languages. We tried getting this done by volunteer effort but it has stalled, so Paul created the RFP for us to hire someone to edit it.

The plan as of the board meeting is to get feedback from the board on the RFP by November 7 so it can be released on November 9. Proposals will be due on December 7, and the board will schedule a call to review the submitted bids on December 14.

We don't have a budget as of now because we don't know how much it will cost, and we don't want to advertise our budget to keep it from influencing the bidders price. Megan has done some preliminary research in to the cost of hiring a technical editor for a project of this size so has a ballpark of what it should cost.

Erin comments she is happy to see forward motion on this suggests the RFP should contain a line about wanting someone on the project who has experience of writing for education on their team.

Megan asks for direction on how to publicize the RFP. Post on LinkedIn? Send to specific companies we're aware of? Paul is unsure about LinkedIn, but thinks we should post it on the ICEAA website. Andy recommends sending an email to the general membership, others suggest an ad in the journal or magazine. Erin suggests reaching out to the academic community and publishing community for suggestions of parties who may be interested in the project.

CEBoK Platform Definition Task Force Update   Andy Prince

Andy took an action to form a platform definition team to determine technical requirements for the CEBoK. Andy thanks Peter A., Britt, Neil Albert and Jason D. for their participation, and Megan for coordinating.

The task force tried to remain focused on the technical aspects of what the software would require but sometimes got drawn into discussing business or content decisions that were off-task. Some ideas were also determined to be second-phase suggestions, such as providing dynamic content or online testing.

Megan has had several meetings with potential providers to show the task force to help demonstrate concrete examples, but in talking with those providers their interpretation of our project based on the term "wiki" lead them to believe we were looking for something far more complicated than we are, at least for the first phase.

Paul asks how we plan to control the distribution of the content and charge users. Whatever platform we choose will need to communicate with our current member database and allow access to those who have paid for CEBoK and deny those who haven't. With the right tool, this can be done relatively easily and quickly.

The biggest hurdle for getting CEBoK online is to get it out of PowerPoint slide-format and into narrative/paragraph format. Once it's in copy/paste-able text, we can move it just about anywhere.

Software Specialty Certification and sCEBoK Update   Brian Glauser

Brian's team has developed table of contents for sCEBoK, leveraging existing CEBoK content where appropriate. There will be 21 modules required for the first level of software certification, and two levels of certification available. Of the 21 modules, 14 of them were presented as training sessions in Phoenix, and the team hopes to offer the first-level exam in Tampa. Peter A. warns the goal of having an exam by Tampa is very aggressive and lofty, and though Brian does not disagree, he wants to keep it as a goal to help achieve it.

The sCEBoK team is looking for people to review the content by chapter, as well as overall to ensure a flow of style and content.

Action: all board members contact/forward contact info of people who may be interested in and qualified to participate in the review process.

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ICEAA has been working closely with Nesma on the certification and curriculum, and the project wouldn't have happened without them. Nesma supports handing sCEBoK over to ICEAA as our own product, which will simplify the issues of ownership, revenue sharing, etc., but the big question remains: who will have responsibility maintenance of the materials, and growing the program?

It is proposed that Nesma be absorbed by ICEAA and we create a Software SIG to manage sCEBoK. ICEAA would then handle the sales and distribution for sCEBoK, as it would be integrated with the rest of the CEBoK products. The Software SIG would have a "board" that managed the SIG and had a seat on the ICEAA Board with or without a vote.

Megan requests the SIG representatives not be referred to as a "board" but a committee or some other term to both reduce confusion between the SIG leadership and the ICEAA board, and to ensure the SIG does not believe it has authority or autonomy to make decisions independently of ICEAA. Peter A. wants to make sure certification stays as the responsibility of ICEAA.

The sCEBoK product has broad appeal worldwide, moreso than anything else ICEAA has presently. It could become a more popular product than CEBoK, could result in many more members, and has potential to change the whole organization. Brian agrees that we have a lot of work to do and decisions to make on how the SIG is managed, how sCEBoK is controlled, and more.

Brian isn't looking for a vote or board approval on the structure immediately, but looking for head-nods or criticism about the general direction so they can continue working on it. The board agrees this is a positive step and the direction they are headed sounds good.

Nominating Committee Update: Brian Glauser

The Nominating Committee is still looking for a few more members to review the applications for the 2019-2021 board election. President, Executive Vice President, Treasurer, Secretary, VP of Professional Development, and Elected Directors (2) up for a vote; the Region Director nominations and elections will be handled separately.

Not all positions have candidates yet, so anyone interested in running for a position should complete an online application or contact Brian by November 15.

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Proposed Bylaws & Constitution Changes: Brian Glauser, Megan Jones

There are several issues with the ICEAA bylaws and constitution documents, mostly the result of using too-similar (or in some cases, identical) language to describe or identify different things. The board has the power to make edits to the bylaws with a simple majority vote of the board; however, the constitution requires a vote of the entire membership. Since the membership will be voting for the new board in early 2019, Brian and Megan's intention is to have the board agree to proposed edits that will be included in the board ballot for the all-membership vote.

The group agrees to approach the suggested edits in the style of a consent agenda, approving them in order as provided in the pre-read slides unless a request is made to discuss a suggested edit in more detail.

The first set of suggestions contained mostly grammatical and word choice corrections, as well as eliminating redundant clauses.

Vote: proposed edits to the following approved:

Constitution articles I-B; VI; VII-A, C, H, I, J, K; VIII-B, E, G; IX-B

Bylaws articles II-A, B, G, H; III-H-1, J; IV-E

Board agreed to change proposed edit to constitution VII-G to read "Individuals may not serve more than two consecutive terms in an elected position unless the first term was not a full term."

Board requested constitution VII-F not be deleted as proposed but updated to a simple line permitting the formation of an executive committee.

Action: Megan to send updated language for the constitution VII-F section on the executive committee. Board will approve prior to the 2019 election.

The second set of suggestions were focused on the Elected Directors, Non-Aligned Director, and Non-Aligned Region Director. The term "Elected Directors" is used in the documents to both describe a particular board position, as well as to describe all board members that were elected, so it is proposed this position be re-named "At-Large Directors." This position has no currently established responsibilities.

The bylaws and constitution contradict each other and themselves as to whether the Non-Aligned [Region] Director is elected or appointed. It is proposed that the Non-Aligned

[Region] Director be removed entirely, and the responsibility of representing members not aligned with a chapter be transferred to the re-named Non-Aligned Directors.

Vote: proposed edits to the following approved:

Update all instances of "Elected Director" to "At-Large Director" in both documents

Constitution articles VII-A-1, VII-B, E, J, K; VIII-B, E, G; IX-B

Bylaws articles III-H, III-I

Action: Megan to create explanatory documents on the proposed constitution edits to include with the 2019-2021 board election ballot.

Chapter Reports
_____

In addition to the reports provided for the pre read, Ellie gives a shout out to the New England chapter for their upcoming workshop. Rich Harwin details the SoCal chapter's September workshop at Northrop Grumman, where they toured the James Webb telescope, and announces an upcoming event in March to be held with the San Diego Chapter. John Deem reports that the Lone Star chapter held a workshop in September that was well received. Erin and Peter W. report that with Peter's new position in Toronto, there is lots of opportunity and interest in pursuing a second Canada chapter in the Toronto area.

2018 Workshop Review   Mike Thompson
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The 2018 Workshop was a success all around, with high attendance, record-breaking revenue, and outstanding feedback. As always, the IBO is looking for new contacts or leads for potential sponsors.

Regarding the upcoming 2019 workshop, feedback on our choice to move the date from June to May has been overwhelmingly positive. We will repeat the earlybird registration pricing structure again – it was a great benefit in 2018 which allowed for better projections for costs. Megan and Christina visited the Tampa hotel earlier in the week; the hotel is beautiful and the meeting with their staff went great.

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New Business

No new business is raised.

Plan New Meeting & Adjourn

The board will conduct a call on December 14 to discuss the CEBoK RFP responses received. Date for the first 2019 meeting tentatively set for February 9, with the date to be solidified by the December 14 call.

With no further comments, a motion to adjourn is raised, seconded, and approved with no nays. Meeting adjourns at 2:46.

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June 11, 2018 Action Item Review

Bob to create a report of ICEAA's spending vs. revenue throughout the year.
DONE

Christina and Sharon to develop marketing piece(s) to promote the availability and
accessibility of various CCEA recertification point opportunities.
Incomplete – will report next meeting

Any board members or others interested in contributing ideas or otherwise volunteering to
remove the calculator requirement and incorporate MS Excel into the PCEA/CCEA exam
are encouraged to contact Peter A.
No comments received. Will keep on the list

Peter A. to present at the fall 2018 board meeting an outline and plan for allowing retired
professionals to maintain some sort of CCEA certification.
DONE

All board members should send any ideas/suggestions/comments on retiree/emeritus status for
the CCEA to Peter A.
DONE

Andy to form a product development team for the CEBoK interface and create a budget for the
requirements-gathering consulting services necessary.
While work is ongoing, the action is completed as far as the action item list.

Neil to determine with the CEBoK Update Task Force a realistic timeframe they can have their
content changes entered into the development wiki so that the updated CEBoK can be
reviewed by an English-language editor before French translation.
*Once we have the editing RFP out, we will be sending the editor any new/updated
material from Neil's group to include in their editing.*

Rick will chair and collect volunteers to participate on a Strategic Plan Update Task Force,
provide a report at the Fall 2018 meeting.
DONE

Megan and Erin will work to develop roles and responsibilities for the Region Directors,
Chapter Presidents, Board Members, and Committee Chairs and will show some progress
at the Fall 2018 meeting.

Half done. Did a rough draft, but will continue to develop detailed job descriptions, expectations. Add to the list of actions for next meeting.

Jason to reinvigorate/re-establish the Senior Government Advisory Panel (carried from February 2018)
Incomplete. Add to the list of actions for next meeting.

Megan and Britt will work to test the possibility of chapters updating their own pages on the ICEAA Website (Carried from September 2017).
Tested some methods but haven't achieved desired result. Add to the list of actions for next meeting.

Brian will attempt a meeting with Paul and Megan on options for and feasibility of collaboration between ISBSG and ICEAA. Moving to June 2018 actions (Carried from September 2017)
Incomplete. Add to the list of actions for next meeting.

Membership Outreach Committee to wordsmith the Elevator Speeches and Value Propositions Jason sent into marketable pieces.
This remains on the agenda for the committee, but they have been focused on other projects. Will keep on the action item list until complete.

Megan to send Greg the membership roster from 2014-2018; Greg will contact the board to find out who will reach out to the former POCs. Greg will review for LM, Rich Harwin will review for Boeing, Peter Braxton will review for Northrop Grumman and Peter Andrejev will review for Booz Allen (all to start). (Carried from June 2017)
Not sure if complete, will keep on the action item list.

ICEAA Executive Committee to develop a business model for sCEBoK to present to sCEBoK committee, review MOU between ICEAA and Nesma for ideas on how the sCEBoK business model could work. (Carried from June 2017). Update February 2018: Brian is getting comments/finalization on MOU now and will be able to move forward.
Reported on during Fall 18, but will continue to develop. Will put a report on the actions for next meeting.

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November 3, 2018 Action Items

Strategic Plan Update Committee should continue their work developing ideas and recommended edits to the strategic plan, present at the next board meeting.

IBO update the recertification application website to include language describing the CCEA-R status.

All are encouraged to send their comments, thoughts, or suggestions on ways to improve the cost estimating cycle slides or request to attend an upcoming Membership Outreach Committee meeting.

All board members should contact or forward the contact info of people who may be interested in and qualified to participate in the Software CEBoK review process.

Megan to send updated language for the constitution VII-F section on the executive committee. Board will approve prior to the 2019 election.

Megan to create explanatory documents on the proposed constitution edits to include with the 2019-2021 board election ballot.

Paul to create and distribute a new milestone schedule for CEBoK.

Christina and Sharon to develop marketing piece(s) to promote the availability and accessibility of various CCEA recertification point opportunities (Carried from June 2018).

Any board members or others interested in contributing ideas or otherwise volunteering to remove the calculator requirement and incorporate MS Excel into the PCEA/CCEA exam are encouraged to contact Peter A. (Carried from June 2018).

Megan and Erin will work to develop roles and responsibilities for the Region Directors, Chapter Presidents, Board Members, and Committee Chairs.

Megan and Britt will work to test the possibility of chapters updating their own pages on the ICEAA Website (Carried from September 2017).

Brian will attempt a meeting with Paul and Megan on options for and feasibility of collaboration between ISBSG and ICEAA. Moving to June 2018 actions (Carried from September 2017).

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Membership Outreach Committee to translate the Elevator Speeches and Value Propositions provided to them into marketable pieces (Carried from June 2018).

Megan to send Greg the membership roster from 2014-2018; Greg will contact the board to find out who will reach out to the former POCs. Greg will review for LM, Rich Harwin will review for Boeing, Peter Braxton will review for Northrop Grumman and Peter Andrejev will review for Booz Allen (all to start). (Carried from June 2017)

ICEAA Executive Committee to develop a business model for sCEBoK to present to sCEBoK committee, review MOU between ICEAA and Nesma for ideas on how the sCEBoK business model could work. (Carried from June 2017). Update February 2018: Brian is getting comments/finalization on MOU now and will be able to move forward. Update November 2018: Brian presented current path forward with Nesma and sCEBoK. Will continue to develop and update.

Ongoing Action Items

All board members: let Megan know about various conferences and meetings throughout the year so she can attend if possible to represent ICEAA, meet new potential members, etc.

Megan to conduct member satisfaction survey. Update: February 2018: delay survey until after value proposition work complete to poll members on those topics. (Carried from June 2015 will keep as an open action until further notice)

All board members: send marketing emails for and links to other conferences they receive to inspire ideas for ICEAA events and marketing.

All board members: think about what they would write in their ICEAA World article about what the value of ICEAA means to them. Megan will request testimonials from each board member.

All board members from sponsor/exhibitor companies: send Megan ideas on marketing the value of participating in ICEAA Workshops

All board members are encouraged to send their comments, thoughts, or suggestions to the Membership Outreach Committee on ways to reach out to the greater community, terms or language that may be helpful in communicating the message, and any other input they may have on marketing, communication, the YouTube video series, and contacts with colleges and universities.

Balance Sheet for 2018

Investments	Balance	Mature
PFCU 4339703-56-5	$32,279	March 2020
PFCU 4507023-56-4	$21,357	May 2019
PFCU 4566018-56-2	$82,997	Feb 2019
PFCU 4717075-56-0	$36,782	Feb 2019
PFCU 4717076-56-8	$36,548	Nov 2019
PFCU 4717077-56-6	$37,048	Nov 2019
PFCU 7047946-56-6	$43,844	July 2019
PFCU 7664998-56-9	$50,727	March 2019
Money Market & Cash	$514	
PFCU Subtotal	$342,096	
Eagle Checking Balance as of 12/31/2018	$281,711	
Total Liquidity	**$623,807**	

Balance Sheet History

ICEAA — International Cost Estimating and Analysis Association
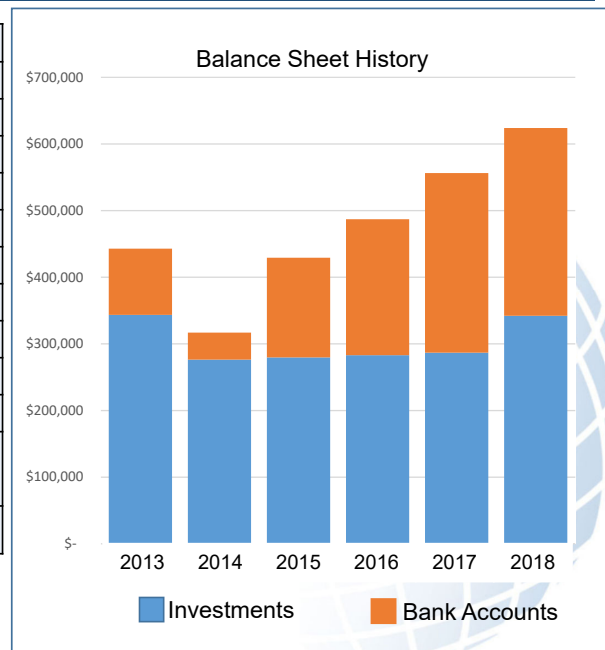
2018 Budget vs. Actual

Activity	2018 Budget	2018 Actual Income	2018 Actual Expense	2018 Net
ICEAA Workshop	$147,280	$445,650	$263,000	$182,650
IPM Conference	$32,650	$36,080	$0	$36,080
Finishing School		$2,765	$571	$2,194
Certification Program	$46,550	$50,255	$1,503	$48,752
CEBoK Sales & Training	$8,060	$15,509	$177	$15,332
Publications: ICEAA World & Journal	($37,835)	$14,514	$42,391	($27,877)
Advertising	$5,000	$4,350	$0	$4,350
Membership: Management & Support	$101,100	$95,945	$500	$95,445
Chapter & Membership Support *Income = Funds released from reserve*	$500	$5,000	$9,138	($4,138)
Interest & Other Income	$3,800	$5,367	$0	$5,367
Staffing & Contractors	($249,000)	$0	$248,282	($248,282)
Office Operations	($74,085)	$0	$63,418	($63,418)
Other Expenses	$0	$0	$0	$0
TOTALS	($15,980)	$675,435	$628,980	**$46,455**

ICEAA — International Cost Estimating and Analysis Association

*Taylor & Francis failed to send invoices in 2018

2019 Budget Estimate

Activity	2018 Actual	2019 Projected Income	2019 Projected Expenses	2019 Projected Budget	Notes
ICEAA Workshop	$182,650	$390,000	$245,000	$145,000	Risk of impact from shutdown on Workshop
IPM Workshop	$36,080	-	-	-	-
Finishing School	$2,194	$3,000	$500	$2,500	
ICEAA Canada Workshop	-	$20,000	$2,000	$18,000	
Certification Program	$48,752	$48,000	$1,500	$46,500	
CEBoK Sales & Training	$15,332	$14,000	$250	$13,750	If new version not released; higher if so
CEBoK Update (release from savings)		$78,000	$78,000	$0	
Publications: ICEAA World & Journal	($27,877)	$11,500	$74,000	($62,500)	Taylor & Francis failed to send invoices in 2018
Advertising	$4,350	$4,000	$0	$4,000	
Membership: Management & Support	$95,445	$86,000	$1,000	$85,000	Risk of impact from shutdown on Membership
Chapter Support & Membership Outreach	($4,138)	$4,000	$8,000	($4,000)	
Interest & Other Income	$5,367	$4,000	$0	$4,000	Interest would go down if CD cashed
Staffing & Contractors	($248,282)	$0	$260,000	($260,000)	2018 Actual + 5%
Office Operations	($63,418)	$0	$75,000	($75,000)	2017 Actual. 2018 seems low.
Other Expenses	$0	$0	$0	$0	
TOTALS	$46,455			($82,750)	

ICEAA Membership 2013-2019

	Oct13	Feb14	Jun14	Sep 14	Feb 15	Ju 15	Sep 15	Mar 16	Jun 16	Sep 16	Feb 17	Jun 17	Sept 17	Feb 18	Jun 18	Oct 18	Jan 19
TOTAL MEMBERSHIP	2203	2084	2020	1794	1703	1712	1719	1652	1672	1614	1505	1426	1358	1333	1420	1414	**1401**
Atlanta	16	16	14	10	11	10	7	6	4	3	4	4	4	4	4	5	4
Australia									47	43	42	51	50	48	58	60	60
Baltimore	44	38	30	31	30	27	26	20	23	24	22	18	15	13	18	17	17
Canada						24	48	58	60	74	51	55	61	56	56	66	57
Central Florida	40	38	31	28	21	21	21	25	27	25	23	20	16	17	19	15	15
Central VA	25	21	23	21	22	23	24	26	26	26	24	23	24	23	22	26	28
Dayton OH	94	79	73	63	60	76	73	70	70	70	63	58	47	47	51	52	51
DC Metro	494	196	460	430	429	408	397	375	377	370	359	348	336	345	356	354	367
Detroit	20	16	12	10	8	8	9	10	10	9	8	8	10	12	14	13	18
Greater Alabama	97	86	83	63	68	80	83	75	80	76	73	60	56	53	57	53	53
Hampton Roads VA	31	28	27	22	20	19	19	17	19	19	21	21	21	18	17	16	14
Houston	22	20	17	15	14	13	16	16	15	15	10	10	9	9	10	10	10
Lone Star TX	3	31	29	24	27	27	27	25	26	27	23	20	19	15	15	16	15
Mid-Atlantic	15	11	11	11	12	13	16	13	13	11	13	13	15	15	16	14	14
New England	91	96	89	83	76	87	82	79	82	81	77	72	56	62	81	87	92
Northwest	194	170	167	124	110	119	130	127	108	78	63	46	36	33	34	31	28
Northwest Florida	15	16	15	15	15	19	16	14	13	12	10	8	7	7	8	18	18
Pike's Peak	37	35	32	31	32	28	27	22	22	25	23	21	22	23	23	21	17
Rocky Mountain / Denver	41	36	30	23	25	27	23	23	27	21	21	18	13	10	11	8	8
San Antonio TX	6	4	4	5	4	6	5	5	5	5	4	4	2	1	2	2	3
San Diego	67	62	59	38	40	45	45	43	47	48	41	40	40	39	46	41	39
So Cal	181	171	166	151	149	150	148	145	140	134	123	120	117	111	118	110	111
St. Louis Gateway	48	46	43	35	30	31	31	30	32	30	30	24	20	16	21	23	22
Twin Cities	12	11	11	9	9	6	6	7	7	6	7	7	7	7	6	7	7
At Large/No Chapter				442	441	445	440	369	392	382	370	357	355	349	357	348	332

ICEAA Membership 2013-2019

	Oct13	Feb14	Jun14	Sep 14	Feb 15	Ju 15	Sep 15	Mar 16	Jun 16	Sep 16	Feb 17	Jun 17	Sep 17	Feb 18	Jun 18	Oct 18	Jan 19
TOTAL MEMBERSHIP	2203	2084	2020	1794	1703	1712	1719	1652	1672	1614	1505	1426	1358	1333	1420	1414	**1401**
BAE										22	26	26	24	24	23	26	23
BAH	133	122	109		79	76	82	84	81	75	61	59	64	71	68	64	63
BMT												15	14	15	10	9	9
Boeing	273	244	256		173	177	174	166	145	100	90	69	58	53	65	68	64
Cobec			20		20	19	21	16	16	16	18	21	22	27	26	27	33
Deloitte			30		17	17	20	17	17	14	9	7	8	16	17	17	17
Galorath									14	18	18	21	18	15	18	18	18
Herren													12	12	10	13	12
Kalman & Company, Inc.																11	12
KPMG															15	15	14
Lockheed Martin	67	68	59		42	43	42	39	40	39	35	31	27	24	26	25	23
MCR	45	39	37		27	28	28	24	29	27	22	25	23	22	25	22	23
MITRE	29	30	30		27	26	24	25	24	24	23	22	21	21	20	19	15
Northrop Grumman					29	31	33	30	31	30	25	25	23	23	26	24	19
PRICE									19	18	17	17	12	11	16	14	14
Quantech Services															21	38	42
Raytheon					14	14	15	14	15	16	16	15	15	14	13	12	13
TASC/Engility															18	12	10
Technomics	66	68	68		71	78	62	62	63	60	58	62	47	54	71	56	64
Tecolote	123	118	114		104	113	109	102	112	112	106	103	87	85	99	95	102

State of the Association:
Membership Trends 2012-2018

Australia	63
Bahrain	1
Canada	76
China	2
Finland	1
France	2
Germany	8
Italy	2
Japan	4
Netherlands	8
New Zealand	1
Norway	1
South Africa	1
Spain	1
Sri Lanka	1
Taiwan	1
UK	61
United Arab Emirates	1
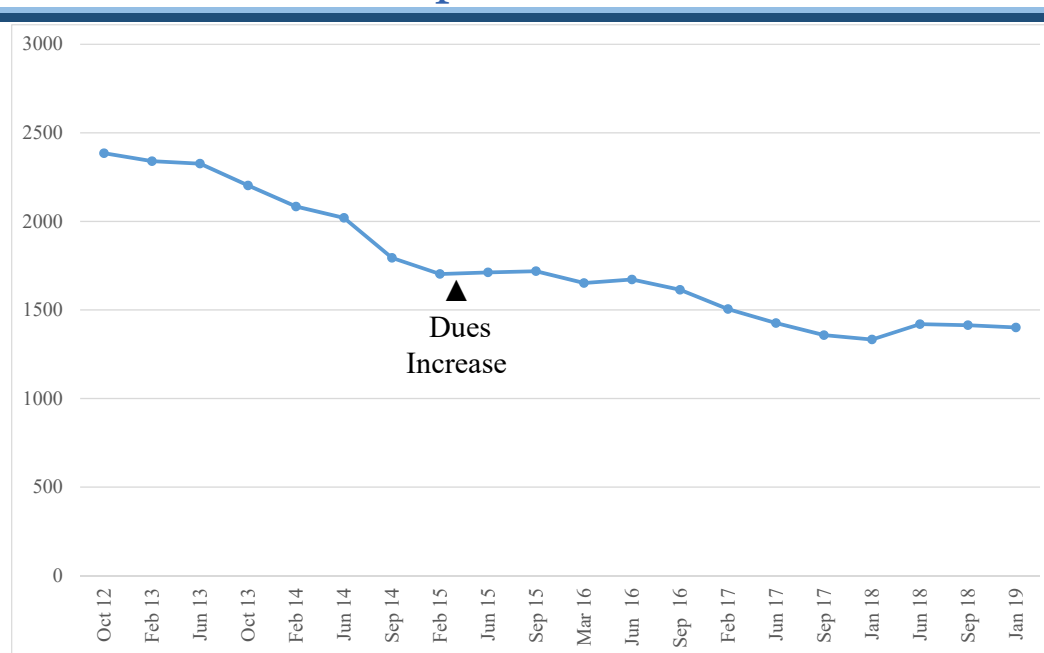
State of the Association:
International Membership

as of January 16, 2019
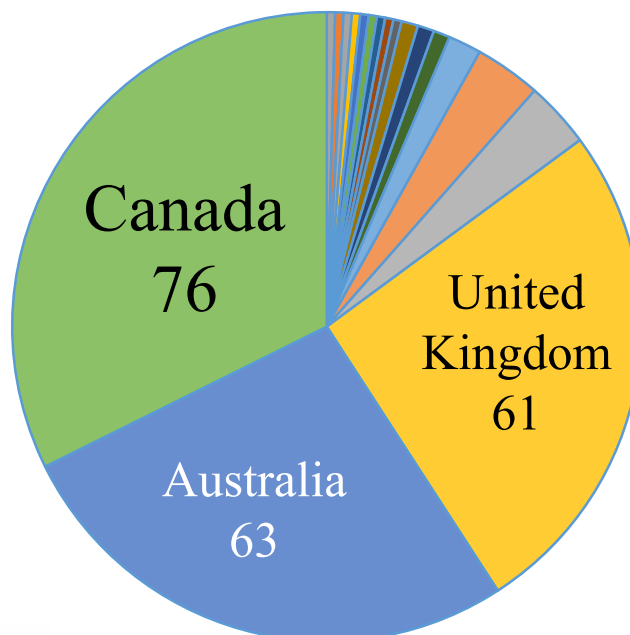
Government Employees *(estimated)*

	May 2017	Sep 2017	Jan 2018	May 2018	Sep 2018	Jan 2019
DoD et al	15	18	16	23	26	16
Air Force	101	109	95	97	103	98
Navy	28	39	31	30	32	28
Army	11	10	14	12	10	10
Marines	-	5	5	4	2	2
Coast Guard	-	1	1	2	1	2
NASA	22	24	20	21	20	20
MDA	-	15	15	14	16	19
State/Local	3	0	1	3	1	1
Misc Gov.	30	34	36	29	25	23

	May 2017	Sep 2017	Jan 2018	May 2018	Sep 2018	Jan 2019
International Government: 117						
Australia	22	23	22	20	20	21
Canada	43	54	49	53	65	58
UK	49	40	42	46	31	30
International Corporations: 137						

Total Government Employees (est.)   335

Total Membership as of 1/16   1401

Percentage of Membership: 24%

25% Jan 2018; 23% May 2018; 25% Sep 2018;

2021 Workshop City: Minneapolis

The Depot
Renaissance® Minneapolis Hotel

- The old Milwaukee Road Depot was constructed in 1899
- Functioned as a train station until 1971
- Our exhibit hall and general sessions will be held in one of the last long-span, truss-roofed sheds surviving in the nation
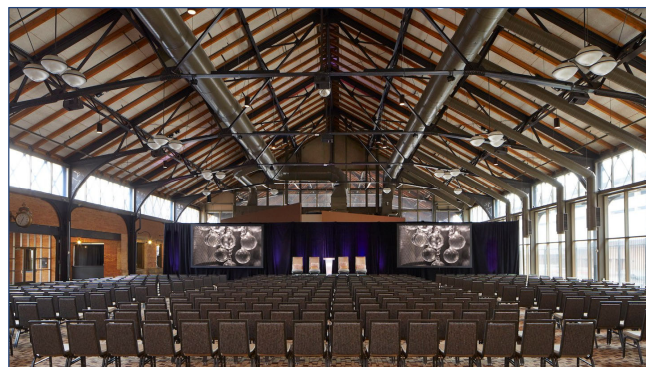
2019 Workshop Update

Christina Snyder
2019 Workshop Chair

ICEAA

Tampa Marriott Waterside Hotel & Marina

ICEAA Rate: $209

30% of block at government rate

† Tampa Riverwalk

† Florida Aquarium

† SS American Victory Museum Ship

† Tampa Bay History Museum

† Ride the Tampa Streetcar for FREE

Our room block ends **April 17** or when we run out

Get ta booking, ya swabs!

ICEAA

Tampa Marriott Waterside Hotel & Marina

ICEAA

2019 Workshop Crew

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                    ┌─────────────────────┐
                    │  ICEAA President    │
                    │   Paul Marston      │
                    └─────────────────────┘
                               │
┌─────────────────────┐  ┌─────────────────────────┐
│ Staff/Facilities/   │  │ Chair: Christina Snyder │
│ Pubs: Megan Jones   │──│ Vice Chair: Britt Staley│
└─────────────────────┘  └─────────────────────────┘
                               │
      ┌──────────────┬─────────┴──────────┬──────────────┐
┌───────────┐ ┌───────────┐  ┌──────────────┐ ┌───────────┐
│ Training  │ │ Program   │  │ Best Paper   │ │ Awards    │
│ Chair     │ │ Chair     │  │ Chair        │ │ Chair     │
│ Omar Akbik│ │ Karen     │  │ Andrew       │ │ Erin      │
│           │ │ Mourikas  │  │ Drennon      │ │ Barkel    │
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ICEAA
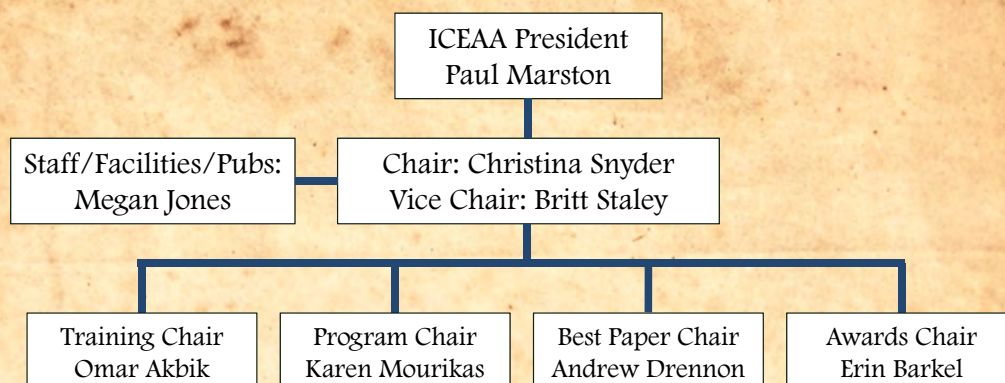
Current Sponsors & Exhibitors
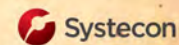
Exhibit Hall as of January 24

Papers Tracks

111 received ✖ 75 scheduled

- Agile
- Analysis & Modeling
- Communications & Visualization
- Computing
- Data Collection & Management
- Machine Learning
- Methods

- Planning & Strategy
- Processes & Best Practices
- Risk
- Scheduling & Programming
- Software
- Space & Missiles

Special Earlybird Rates

	Before April 1:	After April 1:
ICEAA Members	$ 960	$ 1,060
Non-Members	$ 1,065	$ 1,165
Member & Government Employee	$ 840	$ 940
Non-member Government Employee	$ 920	$ 1,020
For companies sending 5 or more paid registrants:		
Member Group Registrant	$ 905	$ 1,005
Non-Member Group Registrant	$ 1,010	$ 1,110

Speakers have received a coupon code for $100 off registration valid until February 25, 2019

Registrations as of January 24

2019: 12 registered

2018: 20 registered (447 final)

2017: 13 registered (406 final)

2016: 3 registered (375 final)

2015: 28 registered (425 final)   *Ran a special for 2015 registrations purchased in 2014

- Though we be a month earlier, it will take time for members to get their sea legs with the new timeframes

- Them scalawags in Warrrshington be muddying the waters

- First big batch of registrations should come February 25; next April 1

ICEAA*

Cost Estimating & Analysis Cycle

Plan

Proposal Requested & Contract Pursued
A contract for new or continuing work is available, preparations begin to win the contract.

Improve

Results Provide a Benchmark for Future Work
Lessons learned make future proposals more accurate.

Estimate

Costs Analyzed & Estimated
To present the most accurate proposal, the costs of completing the project must be projected.
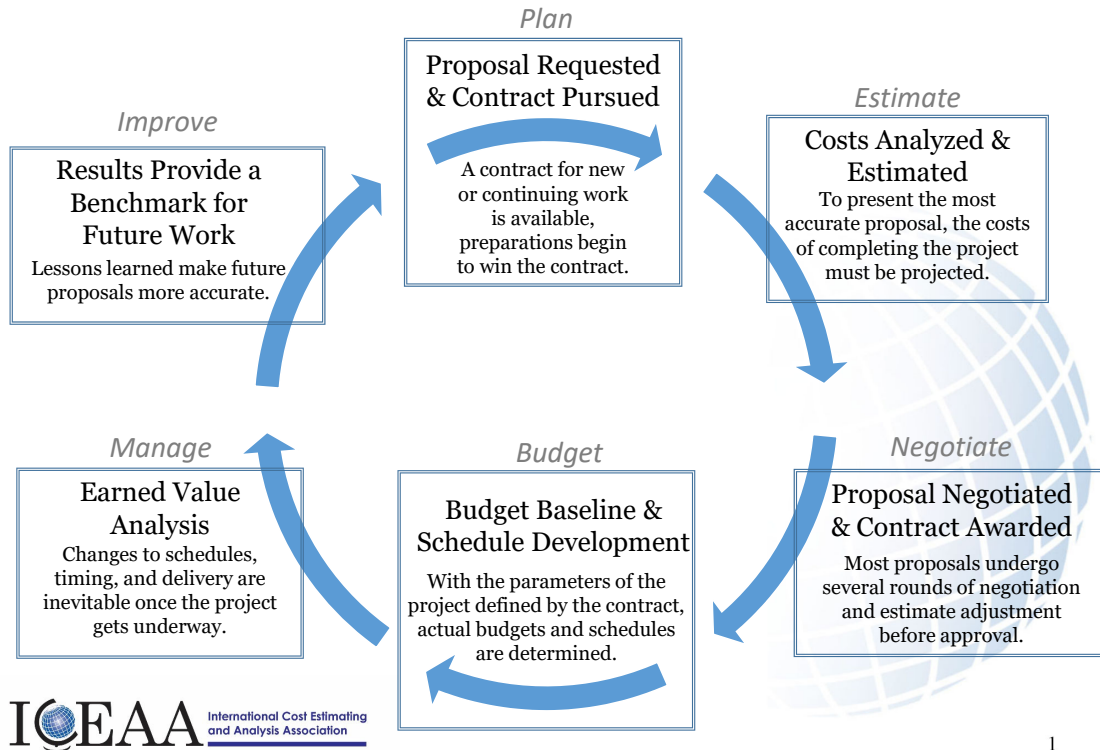
Manage

Earned Value Analysis
Changes to schedules, timing, and delivery are inevitable once the project gets underway.

Budget

Budget Baseline & Schedule Development
With the parameters of the project defined by the contract, actual budgets and schedules are determined.

Negotiate

Proposal Negotiated & Contract Awarded
Most proposals undergo several rounds of negotiation and estimate adjustment before approval.

ICEAA International Cost Estimating and Analysis Association

1

Proposal Requested & Contract Pursued

- Cycle details vary by country and industry, RFPs may either be competitive or sole source, and either government regulations or commercial law may apply

- RFPs are distributed and reviewed then proposals are planned, developed, reviewed, approved and submitted

Plan

- **Solicitor** distributes an RFP with technical requirements for products or services, proposal format requirements, model contract and evaluation criteria

- **Bidders** review the RFP, develop proposal and cost estimating plans, build a cross-functional proposal team, plan, prepare and submit their proposal response

- If the bidder's proposal is awarded by the solicitor, they enter into a contract to complete the work

Relevant skills/disciplines:
Accounting, Business, Financial Analysis, Numerical Analysis, Business Management, Six Sigma, Contract Law, Government Contracting, Mechanical/Electrical/Software Engineering

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2

Costs Analyzed & Estimated

- Determine scope of proposed work and develop the statement of work (SOW)

- Determine methodologies for the various costs for the basis of estimate (BOE)

  - Extrapolate data from historical data and experience, trends, similar projects to estimate labor, time, materials and other direct costs required to perform the work

  - Document the BOE referencing source data for all work scope quantification, changes in resource levels, averages, analogies or estimating relationships used in calculations

Estimate

- Analyze results

  - Cross check results with historical or industry benchmarks

  - Define possible problems and risks. Provide solutions to avoid or mitigate them

  - Assess confidence levels and provide rationale to management

Relevant skills/disciplines:
Parametric Estimating, Bottom-Up Engineering Estimating, Regression Analysis, Risk Analysis, Probability & Statistics, Product Knowledge, BOE Quality Checklists

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3

Proposal Negotiated & Contract Awarded

Most proposals undergo several rounds of negotiation
and estimate adjustment before approval.

- **Bidder** submits their proposal to **solicitor** for consideration

- Both **bidder** and **solicitor** discuss possible changes to proposal

- Estimates are intended to strike a balance between:

Negotiate

  - Maximized profits - for both the bidder and the solicitor

  - Reality - how much it costs vs. how much the solicitor wants it to cost

  - Risk/Opportunity – unforeseen (or included) events that impact the estimate either favorably or unfavorably

What skills and disciplines are valuable during this stage?

- Soft skills: Communication, Intrapersonal Interaction, Situational Awareness, Problem Solving

- Innate talents: Ability to "read your audience," Curiosity, Determination, Empathy, Inquisitiveness, Patience

- Quantitative disciplines: Contract Negotiation, Contract Management, Business Law, Business Management, Engineering

ICEAA International Cost Estimating and Analysis Association

4

Budget Baseline & Schedule Development

With the parameters of the project defined by the contract,
actual budgets and schedules are determined.

The proposal has been accepted: the solicitor hires the bidder to do the job

Budget

- With the parameters of the program established, the bidder's budget for achieving it (ideally less than the total amount they agreed to be paid) will be adjusted to get the best results with the resources available

- Estimator provides data that will help the bidder determine what can be done to best use dollars available with the schedule, number of people it will take to accomplish, plus how much they're paid, rent for their offices, etc.

  - If not, research ways to adjust the plan to make it the project the most profitable for the bidder (e.g. hire more people to get more done in less time)

  - This data can either be evidence to support -or arguments against- whether or not the budget and schedule are reasonable

Relevant skills/disciplines:

Financial Analysis, Earned Value Management, Supply Chain Engineering, Scheduling, Systems Design, Quality Control, Production/Operations Analysis

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5

Earned Value Analysis

Changes to schedules, timing, and delivery are inevitable once the project gets underway.

- The program is continuously managed to ensure the plan is working, on time, and the resources are appropriate

- Controls are put in place to ensure the requirements, schedule and costs are met

Manage

- Earned value management (EVM) is a discipline that continuously compares budget, actual cost, and schedule, to determine if you are on schedule, behind schedule, over or under cost

- EVM data is provided to the program/project managers who then use the data to determine the causes of the variations from cost or schedule, and then explore the means to rectify them

Relevant skills/disciplines:

Financial Analysis, Earned Value Management, Program/Project Management, Integrated Management Schedule (IMS), Operations/Logistics Management

ICEAA International Cost Estimating and Analysis Association

6

Results Provide a Benchmark for Future Work

Lessons learned make future proposals more accurate.

The solicitor's project has been completed. The bidder can now use the knowledge and experience gained from this project for future projects.
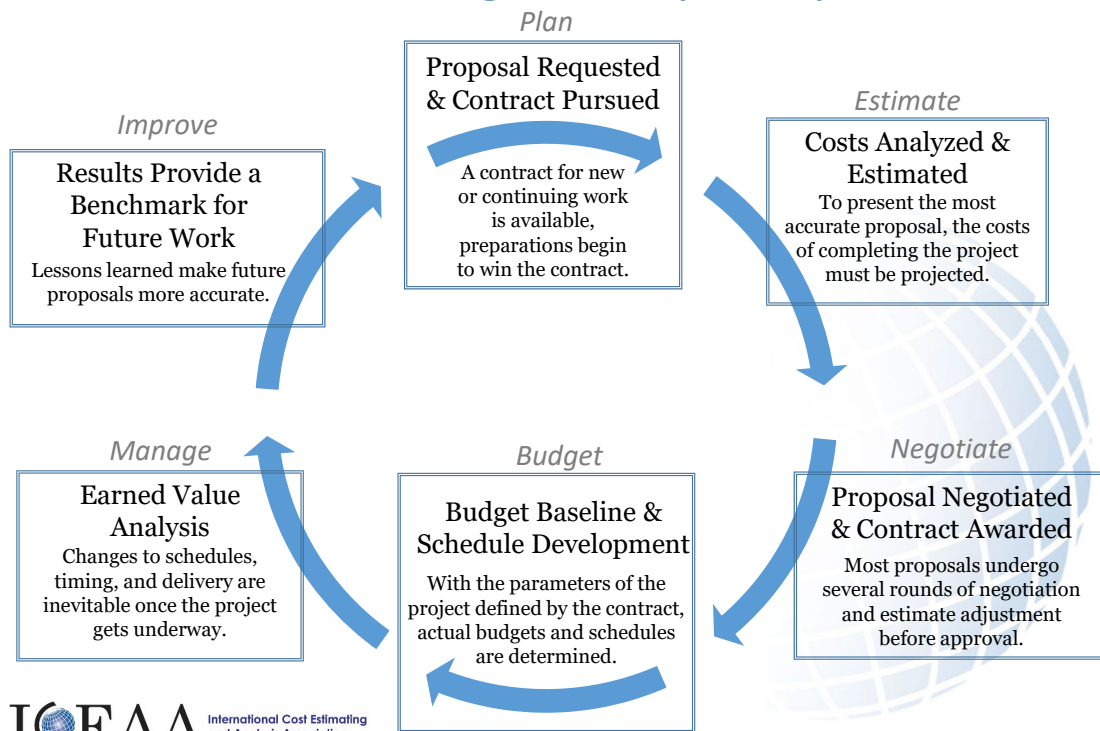
• Actual data collected from this project can be analyzed to better predict and prepare for similar projects (similar size, budget, timeframe, etc.) in the future

Improve

• Document lessons learned to use for future projects

• Differences in schedule, cost, or performance from original plan, whether negative or positive, will be incorporated into future proposals

Relevant skills/disciplines:

Business Operations, Business Analysis, Business Capture, Schedule Analysis Program Management – and everything else from the previous slides!

ICEAA International Cost Estimating and Analysis Association

7

Cost Estimating & Analysis Cycle

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ICEAA International Cost Estimating and Analysis Association

8

JOB TITLE

JOB TITLE

JOB TITLE

JOB TITLE

JOB TITLE

JOB TITLE

JOB TITLE

JOB TITLE

Math
Economics
Calculus
Forecasting
Etc.

Analysis
Critical Thinking
Statistics
Ratios
Etc.

JOB TITLE

JOB TITLE

Concepts Used
College majors
Types of math & stuff
Scientific skills
Topics of study

Cost Estimating and Analysis

Concepts Used
College majors
Types of math & stuff
Scientific skills
Topics of study

JOB TITLE

Concepts Used
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JOB TITLE

Business Analysis
Business Development
Market Share
Stuff people think about

Accounting
Accounting stuff
Budgeting
Whatever else accountants do

JOB TITLE

JOB TITLE

JOB TITLE

Business Concepts
Departments
Divisions
Company Types
Areas of Expertise

Cost Estimating and Analysis

Business Concepts
Departments
Divisions
Company Types
Areas of Expertise

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DRAFT

ICEAA 2019-2021 Strategic Plan

This Strategic Plan is organized into three broad goals to support the mission and vision of the organization and to address strengths, weaknesses, opportunities and threats for ICEAA and the cost estimating community. The Board of Directors will review and revise this plan periodically to ensure that the goals and objectives presented herein enable the Association to achieve its mission and vision of the Association.

I. Our Mission

ICEAA is an international non-profit organization dedicated advancing, encouraging, promoting and enhancing the profession of cost estimating and analysis. We strive to facilitate the success of the cost estimating and analysis community of practice by providing members opportunities to learn, teach, collaborate, present and network in a collegial environment devoted to professional growth and success.

II. Our Vision for the Profession

To be a vital, respected, indispensable and growing community of practice composed of ICEAA certified professionals.

III. Our Vision for the Organization

To be universally recognized for developing, disseminating and advocating best practices that maximize the value of the global cost estimating and analysis community to public and private sector resource decision makers.

IV. Our Goals

1. To create a community of **technical excellence.**

2. To create a community of **collaboration.**

3. To create a community of **innovation.**

V. Objectives

To create a community of **technical excellence**, ICEAA will:

a. Improve existing CEBoK content/platform and develop new CEBoKs (e.g., for software cost analysis) as appropriate.
b. Improve existing certification exams and develop new certification exams as appropriate
c. Establish web-based access to resources (i.e., advisors, study groups and exam-related materials) required to prepare for certification exams.
d. Establish web-based forum for routine, real-time exchange of best practices, tips and tricks
e. Provide a professional, academic quality journal for the sharing of peer-reviewed technical work and other information
f. Conduct an annual conference offering paper and training sessions that exhibit exceptional technical quality reflecting innovative, practical and compelling thought.

The overall intent of these five Goal 1 objectives is to enable cost professional technical competency and credentials, both of which are necessary to enhance the reputation and relevance of the profession.

DRAFT

To create a community of collaboration, ICEAA will:

a. Conduct quarterly web-based, technical-oriented collaboration events (e.g., panel discussions, mini cost research symposia, brainstorming sessions on common needs/challenges, etc.)

b. Establish web-based forum for routine, real-time exchange of ideas, including but not limited to follow-on dialog stimulated by collaboration events.

The overall intent of these two Goal 2 objectives is to <u>ensure the credibility and maximize the value</u> of analytics-based products/services that cost professionals deliver to stakeholders, **both of which are necessary to enhance the reputation and relevance of the profession.**

Furthermore, these objectives should stimulate meaningful dialog leading to other actionable objectives intended to foster the health and size of the profession. This dialog will necessarily include but not be limited to the following important topics: a) what value cost analysts should/could deliver; b) what products/services constitute the 'right' value; and 3) who should/could be consuming these products/services. Each of these topics touch on the market and have the potential to produce concrete thoughts on how our profession moves up the value chain to impact enterprise-level decision-making, i.e., bigger decisions. In essence, these objectives are about exploring the full potential of the profession with a next generation mindset.

To create a community of **innovation**, ICEAA will:

a. Foster community ability to deliver additional value in the form of innovative solutions to emerging cost estimating/analysis challenges (e.g., agile software development, cloud computing, cyber, etc.)

b. Foster community ability to deliver additional value in the form of new/innovative competencies, techniques and approaches (e.g., data science, artificial intelligence/machine learning, etc.) that constitute state-of-the-art in cost estimating/analysis

The overall intent of these two Goal 3 objectives is to <u>ensure important cost estimating/analysis challenges are addressed and big/good ideas are exploited</u>, **both of which are necessary to enhance the reputation and relevance of the profession.** (Note: The big/good ideas will not be limited to those incubated via Goal 2 objectives.)

ICEAA International Cost Estimating and Analysis Association

ICEAA Strategic Plan (SP) Review
Part 3

Rick Collins

John Deem

9 February 2019

The Stark Facts (per Part 2 on 11/3/18)

- If you're not growing, you're dying (regardless of whether "you're" is a company, association or profession)

- You can't grow if you're not relevant

- You can't be relevant if people don't need you

- You can't get people to need you if you don't offer something they value

- Membership drives, outreach to universities and elevator speeches address a symptom not the root cause of ICEAA's chronic problem (i.e., offering increasing, enduring value)

- An annual conference, chapter symposia & lunch presentations and CEBoK (incl. software version) are simply not enough value
  - ICEAA must create additional avenues for members & prospective members to routinely share info, knowledge and ideas

Recommendations to Board (per Part 2 on 11/3/18)

- Make decision to initiate work on the following draft SP objectives NLT Jan 2019
  - Web-based forum for routine real-time exchange of: a) best practices, tips, tricks, etc. *(Goal 1/Objective 4)* and b) ideas *(Goal 2/Objective 2)*
    - ***(Note: Goal 2/Objective 2 success will necessarily enable Goal 3 success)***
  - Quarterly web-based, technical-oriented collaboration events, e.g., panel discussions, mini cost research symposia, brainstorming sessions on common needs/challenges, etc. *(Goal 2/Objective 1)*

- Make decision to establish small committee (chaired by Collins) to establish path to <u>hiring a respected cost analysis practitioner</u> with an active relationship network to be the thinker & primary doer accountable for achieving these objectives. Committee will be authorized to:
  - Establish role/title of this new member of ICEAA staff (e.g., *Service Line Director*)
  - Create job description & requisition
  - Conduct a candidate search based on funding NTE of $3k/week (i.e., 20 hrs/week @ $150/hr)
  - Enter into a contract for the *Service Line Director (SLD)* to launch the "web-based forum" and "quarterly web-based, technical-oriented collaboration events" (NTE of $75K, i.e., 25 weeks at 20 hrs/week
    - ***(Note: SLD will leverage current ICEAA IT/web support & Megan's related expertise)***

BOD Response to Recommendations
(Per Draft 11/3/18 Meeting Minutes)

- "Andy suggests taking what Rick said as a proposal, <u>good food for thought, but that the board should be able to make changes as necessary to make it work.</u>"
- "John D. suggests we do a risk/cause analysis so we can create a problem statement, <u>so we need to determine what we can do to get things going</u>."
- "Brian thinks <u>everyone should look more at the strategic plan</u> provided in the read ahead, because there's lots of good ideas in it, and adds that <u>we need to update the strategic plan, review the SWOT analysis, and then agree to a plan, which may or may not include the suggestions discussed today</u>."
- "Paul likes the idea of paying someone to help us accomplish goals, but <u>we should make concrete plans for what those goals we want accomplished are.</u> Megan agrees, and suggests starting by paying someone on a per-project basis rather than a set amount of hours per week."
- "Peter A. believes <u>some of these ideas would generate revenue</u>, Brian agrees. Paul agrees too, but <u>let's figure out what it would be and what it could mean before we commit to spending on it.</u>"
- **"Action**: Strategic Plan committee should continue their work developing ideas and recommended edits to the strategic plan, present at the next board meeting."

Note: the underlining was not included in the draft minutes dtd 8 Nov.

Progress Since 11/3/18 Meeting (1 of 3)
Prepared Draft 2019-2021 SP

- Revised the current SP document available to public via www.iceaaonline.com
  - The draft follows this presentation and is available for review
  - The draft reflects iterated revisions presented to BOD on 11 June and 3 Nov
  - The draft retains, with some minor editing, the content related to mission and vision
  - The draft is consistent with ground rules conveyed to BOD on 11/3/18 and presented on next slide

> Draft reflects these ground rules

- Content supports an ICEAA vision that is <u>profession (vice association) health/growth-oriented</u>
  - If this this orientation makes sense, then we should agree on what success will ultimately look like
  - I propose the following from the 2013 SP -- *A vital, respected, indispensable & growing community of practice composed of ICEAA certified professionals*

- Less is more -- draft reflects my best, 'unbiased' shot at what's <u>really</u> important (i.e., reflects tempered expectations)
  - Draft SP identifies specific **objectives** by strategic goal (i.e., the *what*)
  - Draft SP does not identify **actions** required to accomplish each objective (i.e., the *how*)
  - Draft SP replaces one of the SP goals, *Create a Community of Relevance,* with *Create a Community of Innovation (see next slide for more on this)*
  - Draft SP does NOT include a variety of ongoing activities that may (or not) constitute **actions** required to accomplish draft objectives
    - Not suggesting these activities haven't been worthwhile, but strongly recommend we determine what's <u>really</u> important & why?

Slide 5

Progress Since 11/3/18 Meeting (2 of 3)
Initiated Work on Two SP Objectives

- Collins will make the following experiments happen with some help
  - Web-based, technical-oriented collaboration event *(Goal 2/Objective 1)*
    - Brainstorming event (one hour) via ICEAA web ex on (or about) either 27 Feb or 17 Apr
    - Topic is *cost analysis in an accelerated acquisition environment (aka Section 804)*
    - Will need some IBO help with event registration & Webex
  - Follow-on collaboration on same topic via web-based forum *(Goal 2/Objective 2)*
    - Webinar participant and non-participant exchange of ideas via Mitre's CostFACTS "discussion" function
    - Mitre (Dan Harper) to facilitate participant and non-participant registration as new CostFACTS member
    - Registration info to be included in ICEAA announcement for the Feb/Apr event

- If these experiments succeed in drawing a satisfied audience, Collins will select another topic of interest and run a second set of experiments in the summer

- Depending on the topic, the level of participation via CostFACTS may represent enough demand for a different type of web-based, technical-oriented collaboration event, i.e., half or full day workshop

Slide 6

Progress Since 11/3/18 Meeting (3 of 3)
Cost Analysis Practitioner Support

- Collins & Deem have not spent any time on this

- That said, Collins' effort planning/running the aforementioned experiments and other web-based collaboration events is absolutely something the practitioner could/should handle

Recommendations to Board

- Approve draft 2019-2021 plan
  - Revisiting the SWOT analysis prior to approving the plan is unnecessary
  - Revisiting performance metrics is likewise unnecessary

- Prioritize the objectives

- Distribute plan to Chapter Presidents

- Post plan on website and announce via email to all members

- Further membership awareness via announcement at ICEAA 2019 conference

On a Final Related Note
Strategic Networking Suggestions

- Recognize the critical role of networking, outreach efforts, value proposition and elevator speeches to the sustainment of ICEAA
  – Conduct Region Director and Chapter President networking forums with a focus on how the strategic plan applies to each of them
  – Step up Industry, Sponsor, Government networking at conferences
  – Facilitators of presentations, workshops, conferences – Be cognizant of the ICEAA Strategic Plan and helping to better understand the value ICEAA offers by engaging participants on what they need and what they value
  – Leverage the track chairs at conferences to be the eyes, ears and voice of the strategic planning committee for individual conference sessions
  – Board members should take a lead role engaging government attendees and better understanding their interests and need so ICEAA can better deliver value to their communities
  – Take a similar approach to sponsors and major employers for their respective industries
  – Share success stories of effectively networking with government, academia and other affiliated professional associations.

ICEAA International Cost Estimating and Analysis Association

Board of Directors Meeting

Certification Program Report

February 9, 2019
Peter Andrejev, Director of Certification

Manufacturing   Defense   Space   Environment   Transportation

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Overall Summary Statistics

- Overall certifications as of January 22, 2019:
  - CCEA® 784 (including 17 CCEA®-P) (800 as of 10/12/18)
  - PCEA® 138 (122 as of 10/12/18)
  - CPP 9 (8 as of 10/12/18)
  - Overall 74% of applicants taking the exam earned certification in 2018

- Re-certifications:
  - 7 Re-certifications in 2019 to date
  - 97 Re-certifications in 2018 (80 in 2017, 159 in 2016)
  - Annualized Recertification rate: 60% (86 of 141 eligible in 2018)

- Other Countries with Certified Individuals:
  - Australia – 4
  - Belgium – 1
  - Canada – 57
  - Egypt – 1
  - UK – 63
  - Japan – 1
  - Saudi Arabia – 1
  - Puerto Rico - 2

ICEAA International Cost Estimating and Analysis Association

Certification Program since last time…

- Operational Status
  - 136 applicants have tested in 2018 (133 in 2017)
  - Of the 136, 100 were from consulting companies, 24 from government (5 USAF, 3 Army,1 US DoD, 15 DND Canada)
  - 25 are currently scheduled to test in 2019

- Strategic Agenda
  - "New" certification product – Certification in Software Cost Estimating
    - Software Cost Estimating committee chaired by Brian Glauser
  - International certification standards – Intent to reengineer ~7 questions in Part II that might be US-biased based on Canadian test results
  - Capture questions from "Finishing School" to augment Exam and practice sessions
  - Secession planning – Identifying deputy(s) for next generation leadership

- Action Items
  - ✓ CCEA®–Retired/Emeritus – BoD agreed in principle on CCEA®–Retired designation
    - ✓ No formal policy or advertising at this time; Practitioners must petition IBO individually
    - ✓ Must remain active in community; Reduced employment recertification points requirement
    - ✓ Once CCEA®–Retired conferred, cannot "reactive" CCEA® designation
  - ✓ Continued support to Membership Outreach Committee

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ICEAA International Cost Estimating and Analysis Association

Salient issues with Certified Software Cost Estimator certification*

- Intent for software training and certification to be new, separate and distinct programs; **not** specialty extensions of CEBoK or CCEA® program
  - Target new audiences – IT/software professionals and companies
  - CCEA **not** required to become Certified Software Cost Estimator (CSCE)* or Professional Software Cost Estimator (PSCE)*
  - CEBoK **not** required; Software Cost Estimating Body of Knowledge (Software CEBoK) sufficient training/knowledge source

- Targeting two (2) software certification designations
  - Certified Software Cost Estimator (CSCE)* - Primary certification
  - Professional Software Cost Estimator (PSCE)* - Intern-like designation

* Naming conventions are tentative and have not been finalized at this time.

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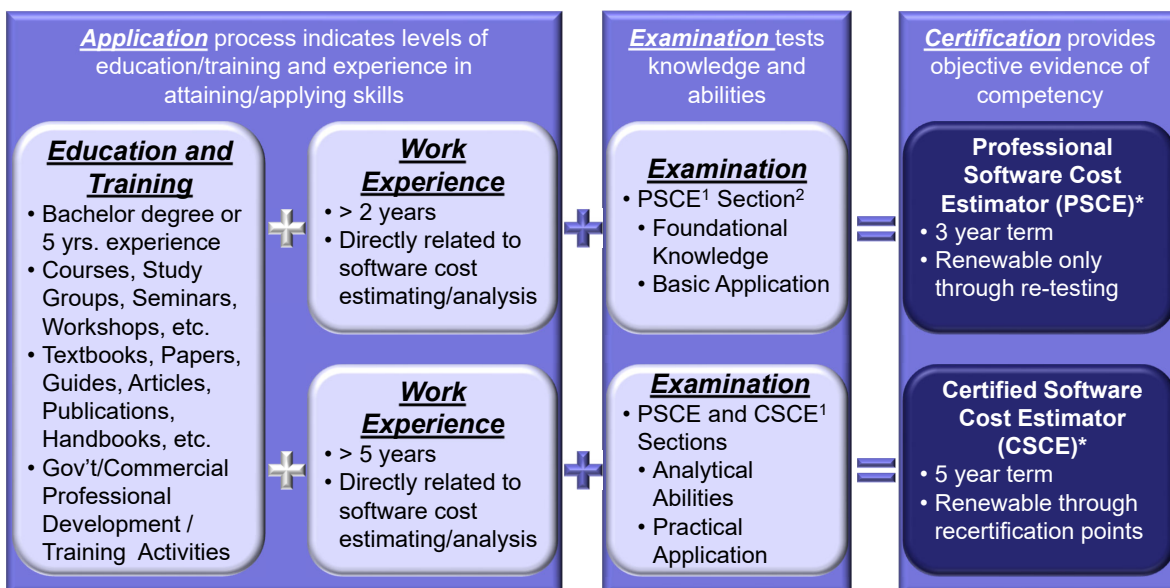**ICEAA** International Cost Estimating and Analysis Association

Salient issues with Certified Software Cost Estimator* certification (cont'd)

- Distribution of exam questions for each designation
  - Option 1: PSCE and CSCE to test all 18 modules, but at different levels of knowledge, skills and abilities
  - Option 2: PSCE section to test only first 9-12 "introductory" modules, while CSCE section tests remaining 6-9 modules

- Value proposition and branding/messaging implications:
  - CCEAs can (still) estimate software (but not as well as CSCEs?)
  - CSCEs can estimate software in non-IT systems, e.g., ISR, Comms, Navigation, Medical (but need CCEAs for hardware?)
  - CEBoK (only?) covers foundational knowledge of software
  - Software CEBoK addresses (hardware?) life cycle implications

* Naming conventions are tentative and have not been finalized at this time.

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ICEAA International Cost Estimating and Analysis Association

We intend to use training, work experience, and examination to assess certification competency

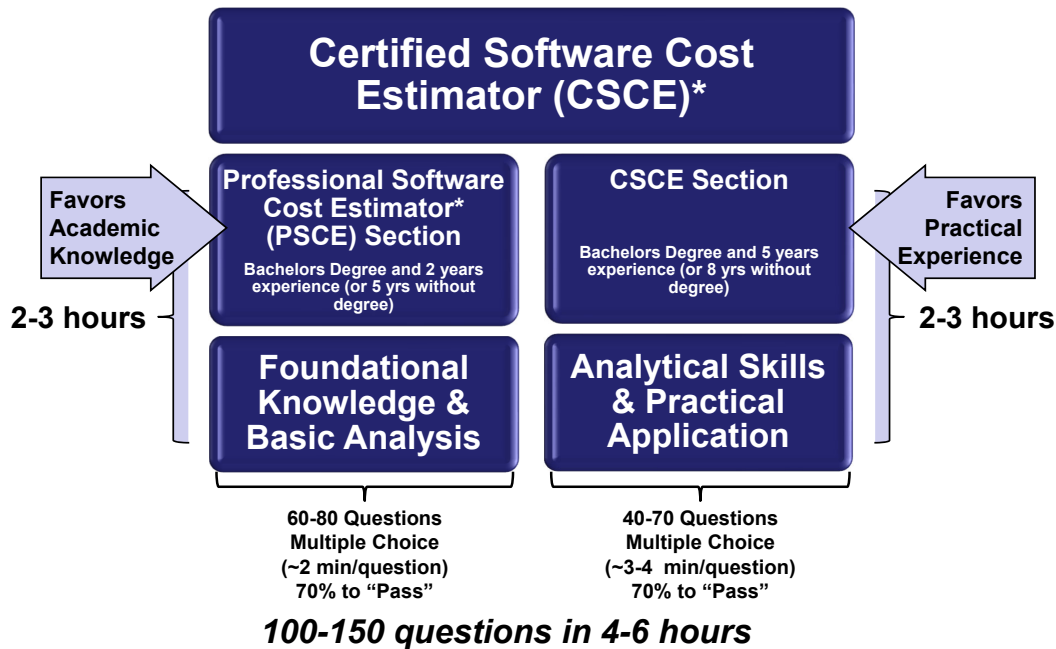| Application process indicates levels of education/training and experience in attaining/applying skills		Examination tests knowledge and abilities	Certification provides objective evidence of competency
Education and Training • Bachelor degree or 5 yrs. experience • Courses, Study Groups, Seminars, Workshops, etc. • Textbooks, Papers, Guides, Articles, Publications, Handbooks, etc. • Gov't/Commercial Professional Development / Training Activities	**Work Experience** • > 2 years • Directly related to software cost estimating/analysis	**Examination** • PSCE[1] Section[2] • Foundational Knowledge • Basic Application	**Professional Software Cost Estimator (PSCE)*** • 3 year term • Renewable only through re-testing
	Work Experience • > 5 years • Directly related to software cost estimating/analysis	**Examination** • PSCE and CSCE[1] Sections • Analytical Abilities • Practical Application	**Certified Software Cost Estimator (CSCE)*** • 5 year term • Renewable through recertification points

[1] Naming conventions are tentative and have not been finalized at this time. *
[2] Applicants with less than 5 years of experience may take both sections of the examination. Those who pass both sections will automatically be designated a CSCE when attaining 5 years of experience

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ICEAA International Cost Estimating and Analysis Association

Vision for Certified Software Cost Estimator* examination is comprised of two sections

Certified Software Cost Estimator (CSCE)*

Favors Academic Knowledge →

Professional Software Cost Estimator* (PSCE) Section

Bachelors Degree and 2 years experience (or 5 yrs without degree)

CSCE Section

Bachelors Degree and 5 years experience (or 8 yrs without degree)

← Favors Practical Experience

2-3 hours

2-3 hours

Foundational Knowledge & Basic Analysis

Analytical Skills & Practical Application

60-80 Questions
Multiple Choice
(~2 min/question)
70% to "Pass"

40-70 Questions
Multiple Choice
(~3-4 min/question)
70% to "Pass"

100-150 questions in 4-6 hours

* Naming conventions are tentative and have not been finalized at this time.

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ICEAA International Cost Estimating and Analysis Association

Option 1 exam tests across the 18 modules of Software Cost Estimating Body of Knowledge

Module Title	Track No.	No. of Section 1 Questions	No. of Section 2 Questions	Total No. of Questions
Introduction - Software Engineering	SWTxx	3-5	3-5	6-10
Software Engineering Lifecycles	SWTxx	3-5	3-5	6-10
Estimation in the Software Lifecycle	SWT01	3-5	3-5	6-10
Estimation Principles	SWT02	3-5	3-5	6-10
Solution Based Estimation	SWT03	3-5	3-5	6-10
Basis of Estimate (BOE)	SWT04	3-5	3-5	6-10
Basis of Measurement (BOM)	SWT05	3-5	3-5	6-10
Budget and Pricing	SWT06	3-5	3-5	6-10
Cost Drivers	SWT07	3-5	3-5	6-10
Scheduling	SWTxx	3-5	3-5	6-10
Estimation of Software Lifecycles	SWTxx	3-5	3-5	6-10
Software Cost Estimation Methods	SWT08	3-5	3-5	6-10
Estimation Methods – Size Based Methods	SWT09	3-5	3-5	6-10
Metrics Collection and Basic Analysis	SWT10	3-5	3-5	6-10
Statistics to Support Basic Metric Analysis	SWT11	3-5	3-5	6-10
Benchmarking	SWT12	3-5	3-5	6-10
Introduction – Application Maintenance	SWT13	3-5	3-5	6-10
Estimation Maturity	SWT14	3-5	3-5	6-10
		60-80	40-70	100-150

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Option 1: Section I tests knowledge/skills while Section II tests skills/abilities

Knowledge | **Skills** | **Abilities**

Knowledge		Skills		Abilities	
Define	Demonstrate	Analyze	Assemble	Compare	Appraise
Describe	Determine	Apply	Build	Contrast	Assess
Identify	Discuss	Calibrate	Compose	Differentiate	Choose
Locate	Examine	Calculate	Construct	Evaluate	Communicate
List	Explain	Compute	Create	Experiment	Criticize
Recall	Express	Conduct	Design	Hypothesize	Critique
Recognize	Reference	Employ	Develop	Normalize	Defend
Report	Restate	Extrapolate	Establish	Propose	Discount
State	Review	Forecast	Introduce	Rank	Display
	Track	Obtain	Formulate	Reconcile	Distinguish
	Translate	Perform	Schedule	Relate	Judge
		Quantify	Organize	Revise	Justify
		Solve	Plan	Score	Interpret
		Use/Utilize	Prepare	Substitute	Present
			Set	Test	Prioritize
				Validate	Resolve
				Verify	Select
					Summarize
					Value

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ICEAA International Cost Estimating and Analysis Association

Option 2 requires separation and prioritization of modules into "intern" versus "expert" _topics_

Module Title	Track No.	No. of Questions
Introduction - Software Engineering	SWTxx	6-8
Software Engineering Lifecycles	SWTxx	6-8
Estimation in the Software Lifecycle	SWT01	6-8
Estimation Principles	SWT02	6-8
Solution Based Estimation	SWT03	6-8
Basis of Estimate (BOE)	SWT04	6-8
Basis of Measurement (BOM)	SWT05	6-8
Budget and Pricing	SWT06	6-8
Cost Drivers	SWT07	6-8
Scheduling	SWTxx	6-8
Section I - PSCE		60-80
Estimation of Software Lifecycles	SWTxx	5-9
Software Cost Estimation Methods	SWT08	5-9
Estimation Methods – Size Based Methods	SWT09	5-9
Metrics Collection and Basic Analysis	SWT10	5-9
Statistics to Support Basic Metric Analysis	SWT11	5-9
Benchmarking	SWT12	5-9
Introduction – Application Maintenance	SWT13	5-9
Estimation Maturity	SWT14	5-9
Section II - CSCE		40-70
Total		100-150

Draft Example

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ICEAA International Cost Estimating and Analysis Association

The certification process will entail 5 easily understood steps

1. Determine certification level and eligibility – Described at
   http://www.iceaaonline.com/certification

2. Complete and remit application – Apply online at
   http://www.iceaaonline.com/application; Upload required documents

3. Confirm test site and date – Register for scheduled exams at
   http://www.iceaaonline.com/certification-matters/exam-schedule;
   Contact International Business Office at iceaa@iceaaonline.org

4. Study for and take the examination – Review training
   materials such as CEBoK® http://www.iceaaonline.com/cebok;
   Register for annual Professional Development and Training
   Workshop at www.iceaaonline.com/workshop

5. Receive benefits of the certification – Be recognized at
   http://www.iceaaonline.com/certification-matters/achievements

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ICEAA International Cost Estimating and Analysis Association

Central VA Chapter Report

By Britt Staley, ICEAA Central VA Chapter President

Our ICEAA Central Virginia (CVA) Chapter wrapped fiscal year (FY) 2018 with a bang! At our fourth quarter meeting we ate Jersey Mike's subs while Ken Rhodes of Technomics, Inc. taught our membership a little bit about "Software Data Collection and Analysis for Proposal Evaluation." In closing out the year, we also took some time to recognize our FY2018 CVA Chapter Awardees! Read more about their outstanding work online at http://www.iceaaonline.com/chapters/cva/

We welcomed 2019 during our first quarterly ICEAA CVA Chapter Members Meeting on November 14th, graciously hosted by our friends at Naval Surface Warfare Center Dahlgren Division (NSWCDD). This meeting boasted an intriguing presentation on Business Case Benefits Analysis as presented by Jim Sunderlin of Technomics, Inc. Attendees had the opportunity to learn more about basic process and steps involved in conducting benefit analysis for investment decisions. A big thanks goes out to our presenters for facilitating these exceptional learning opportunities!

In the Regional arena, we hosted our first ICEAA Central Virginia Chapter Social on November 30th! This event proved to be a great success (and a great time!). Hosted at Ledo's Pizza in Dahlgren, Virginia, chapter members, colleagues, and friends enjoyed good food, good brews, and good company. It was great to see representation from across the region, government and contractors alike. Sincere thanks to Megan Jones (ICEAA Executive Director) for joining us as our special guest! With this, we'd also like to take a moment to recognize some of our newest CVA Chapter Members! We look forward to having you on board

- John Brown, NSWCDD
- Jeremy Goucher, MCR
- Gail Flynn, NSWCDD
- Paul Neubert, NSWCDD

- John Rensink, NSWCDD
- Ericka Kadner, Kalman & Company, Inc.
- Katie Barbre, NSWCDD

Nationally we are prime to make one heck of a showing in the coming months. Our membership has had multiple papers approved and are participating in the training track for the 2019 ICEAA Professional Development and Training Workshop in Tampa. On May 11th, our chapter will be hosting a CCEA/PCEA Exam on May 11th so our growing membership can obtain those four powerful letters! Finally, as this fiscal year comes to a close, we will be preparing for our Chapter election cycle for the FY2020-2021 term – welcoming new leadership and bidding a warm "adieu" to the current. It's an exciting time at the CVA Chapter and there is still so much more to come!

The ICEAA Central VA Chapter 2018-2019 Board of Directors:

President: Britt Staley (bstaley@technomics.net)

Vice President: Tommy Knoll (tknoll@tecolote.com)

Treasurer: Brian Bucceri (bbucceri@tecolote.com)

Secretary: Nicole Robertson (nrobertson@technomics.net)

Membership: Erik Gyorgy (egyorgi@tecolote.com)

ICEAA Detroit Chapter REPORT

January 22, 2019

Board of Directors:

President: David Holm

Vice President: Jennifer Flanagan

Secretary: Dan Germony

Training: Patrick McCarthy

Social Events: Brandon Bryant

Upcoming Events:

Kicked off the next ICEAA training certification class on 3 Jan 2019 which will be held every Wednesday at the U.S. Army TACOM until the end of March.   Pat McCarthy has done a tremendous job as the Chapter training lead to put together the training curriculum and line up the instructors for each topic. I reached out to the Army ground vehicle OEMs to make the training available and as a way to help increase Chapter membership.   We have 35 registered individuals from both Government and Industry who will be participating in the training with the exam set for March 28, 2019. The topics are being taught by eight different instructors from the Detroit Chapter who have all passed the CCEA exam.   It is very encouraging to see such a big group attend this cohort.

Member Outreach:

We are going to start doing monthly ICEAA Socials to increase the networking opportunities and to try and increase membership among the ground vehicle OEMs and suppliers.   First event this year is scheduled for Wednesday January 23, 2019.

Member Recognition: None this reporting period.

Other: Nothing this reporting period.

ICEAA LONE STAR CHAPTER REPORT

February 9, 2019

Board of Directors:

President:	Rex Potter
Vice President:	Geoff Holland
Treasurer:	Lisa Schmitz
Secretary:	Vacant
Past President:	Augie Goerner

Networking Social. The Lone Star Chapter hosted a Professional Networking Social Wednesday, August 22 at Blue Mesa Grill near West Seventh in Fort Worth. Non-members and guests were encouraged to attend. Of particular interest was how senior practitioners see the future of the cost estimating and analysis profession versus how new practitioners see it. Special Guest, Glenn Weissinger, retired Lockheed Martin Strategic Planning VP, shared highlights from his Ted Talk on the Promotion Trap. Check it out on YouTube. Let me know if you have trouble finding it.

Professional Development Workshop. The Fort Worth workshop was held Wednesday, October 17 at the Holiday Inn Express & Suites Western Center. The workshop included 9 sessions packed into an 8 am to 5 pm agenda. Topics of relevance to the Region 6 cost estimating and analysis profession came from various steps in the proposal cycle including affordability, proposals, estimating methods, contract pricing, financial analysis, negotiating skills and program management.

- **Cost Estimating & Analysis Skills**
    - ICEAA Overview on Education and Skills for Cost Estimating Careers was presented by John Deem, CCEA, ICEAA South Central Region Director and workshop emcee. Some say that cost estimating could be considered both art and science however studies show that salaries for art professions tend to be lower than salaries for science professions so downplaying the art aspects might be a better strategy financially speaking!
- **Affordability Analysis Skills**
    - Value Driven Solutions, Affordability Does Not Tell You What You Get for Your Money was presented by Teresa McCarthy, Lockheed Martin Aeronautics, Quality Assurance, on a mission to foster innovative ideas and pursue them by taking chances, revolutionizing the future, and owning cutting-edge engineering!
    - Affordability and Value Analysis Modeling was presented by Phil Fahringer, Lockheed Martin Aeronautics, demonstrating advanced and powerful decision analysis modeling capabilities and skills using excel as it is available to most of us today.
    - Price-to-Win with PRICE True Planning was presented by Melissa Winter, PRICE Systems who also broadcast her part of the workshop to the PRICE Systems user community via webinar. PRICE Systems also helped sponsor the workshop for the Lone Star Chapter. Thanks!
- **Manufacturing Estimating Skills**
    - Improvement Curve Perils & Pitfalls was presented by Brent Johnstone, Lockheed Martin Aeronautics, an often recognized presenter at ICEAA annual conferences. Many of you

ICEAA LONE STAR CHAPTER REPORT

February 9, 2019

know how fortunate we are to have Brent available to engage our local chapter on a regular basis.

- **Proposal Skills**
  - o Contract Pricing for Common Contract Types was presented by Geoffrey Holland, PCEA, Lockheed Martin Aeronautics, and he also presented Financial Goodness, How do you know if it's a good deal? Much thanks to Geoff for doing a double header by preparing and presenting two sessions. Thanks!
  - o Negotiating Strategy Review was facilitated by John Deem and involved complete audience participation to leverage the knowledge in the room. Negotiating skills is always a topic sure to engage the entire audience. This was a follow-up session to a presentation from a prior chapter workshop.

- **Program Management Skills**
  - o Federal Transit Administration Programs and Cost Estimate Management was presented by Brian Ehrler, PMP, LEED, AP, Burns Engineering, who provided a much appreciated divergence from the defense-centric presentations, covering the challenges of cost estimating atypical tasks encountered budgeting for New York City's recovery from Hurricane Sandy.

Much positive feedback was collected from the audience at the close of the workshop and more positive feedback was collected from attendee management after the fact. We'll definitely plan on doing more of these down our dusty Texas road!

2019 Planning is underway.

- Outreach efforts will include networking at the Lockheed Martin companies and Bell Textron in Fort Worth as well as other companies in Dallas/Fort Worth metroplex. We will also seek common interests with affiliated associations like PMI, APMP and NCMA. Outreach efforts will target local universities.
- Our chapter board has a need to fill the vacant Legal Secretary position so we will be benchmarking with other chapters regarding recruiters and incentive packages to secure the best talent!

New England Area Chapter Report

Andrew Walker, ICEAA New England Chapter Vice President

In the Spring of 2018, the New England Area ICEAA Chapter Board challenged themselves to get away from the same old, same old and offer our members a more rewarding and worthwhile experience. We were going to reach out to speakers who would present attention-grabbing topics, break away from deep-dives into very specific cost estimating areas, and put on events that had an overall appeal to our audience different than they've seen in other cost estimating forums. We made it our charge to also revitalize our yearly cost workshop, boost our membership, as well as have more outlets for the entire chapter to socialize, network, and more importantly have some fun!

Since this internal challenge was presented, the board was able to land the following speakers for their quarterly chapter lunches:

Anette (Peko) Hosoi, Professor of Mechanical Engineering at MIT; *Luck and the Law: The Role of Chance in Fantasy Sports and Other Activities*

Richard M. Cockley, AFLCMC/HB (PEO Digital) Cost Chief; *Leadership Today and Tomorrow*

In addition to these two fascinating and thought-provoking speakers, the New England chapter had a Fall Social at the local watering hole outside of Hanscom AFB, with free appetizers, pool, darts, and music for all ICEAA members. The social was attended by over 50 members!

The culmination of a successful 2018 chapter year came in December... The ICEAA New England Area Chapter put on a Cost Workshop attended by over 70 cost estimators. There were two tracks of topics, allowing for the attendees to pick and choose their focuses. Topics ranged from Agile Software Estimating to ACAT I Cost Estimating Lessons Learned to Comparing Cloud Costs Equitably to a host of other interesting and relevant topics.

Following the workshop, the entire audience was invited to go into downtown Boston and visit the Harpoon Brewery for a tour and tasting. In addition to the tour, the head Harpoon Brew Master presented the business-side of beer-making, really tying the entire day (and year) together for the large group of cost estimators.

In 2018, the New England chapter upped their membership from 60 to 89, all with the goal of offering our members a worthwhile experience. It's safe to say: challenge accepted and challenge met! We look forward to keeping the momentum going in 2019 -- Cheers!

ICEAA Region 7 News (Southern California and San Diego Chapters)

Spring 2019

By Rich Harwin, Southern California (SoCal) Chapter President and Region 7 Director,

And by Tom Bosmans, SoCal Chapter Vice-President

The Southern California (SoCal) Chapter of ICEAA Region 7 conducted a very successful workshop at Northrop Grumman Space Systems in Redondo Beach, California on 26 Sept. Our speakers and presentations were:

Dr. John Pinder - Northrop Grumman Aerospace Systems: *Cost Analysis in the Strategy Organization*

Karen Mourikas - The Boeing Company: *Machine Learning & Non-Parametric Methods of Cost Analysis*

Kurt Brunner - KB Enterprises: *Would A Cost Growth Factor Help Alleviate Continuing Cost Overruns?*

Hank Apgar, MCR Solutions, LLC: *Cost Estimate Credibility*

Rich Mabe - PRICE Systems, LLC: *Cyber Total Cost of Ownership*

Doug Howarth, MEE Inc: *Demand, Recurring Costs, And Profitability*

And our day was wrapped up with a tour/viewing of the James Webb Space Telescope in the NGC clean room facility as it is being prepared and tested prior to launch.

The Chapter also conducted a joint So Cal/San Diego workshop at Leidos in La Jolla, California on 12 Dec. Our speakers and presentations were:

Jay McGuerty – Leidos: *Network Field Survival Guide: The Way of the Packet*

Nathan Eskue - Northrop Grumman Innovation Systems, Launch Vehicles Division: *A Robot Brain Might Be the Best Forecasting Tool Possible*

Kurt Brunner - KB Enterprises: *CER Issues and Solutions*

Dr. Sadrul Ula - University of California – Riverside*: Electrical Engineering Evolution*

Eric Sick - Galorath Incorporated: *SEER-Space in the 21st Century*

At the conclusion of our joint workshop, we met for a networking Happy Hour at Rock Bottom Brewery in La Jolla.

The SoCal is planning the next workshop now. The Jet Propulsion has offered to host but approvals are held up pending the conclusion of the Government shut-down.

December also saw the results for our So Cal chapter election. We thank Pam Ehhreich of Boeing for her time and effort as the Election chair. Here is our new board for the 2019-2020 term.

And our thanks for Chris Hutchings and Dara Billah as our outgoing Treasurer and Board member for their service and support over the last 4 years.

Washington Capital Area Chapter News

By Meghan Kennedy, Washington Capital Area Chapter President

Upcoming Chapter Workshop

The Washington Capital Area Chapter will once again host a workshop this spring. This year's event is scheduled for March 20 at the same location as the 2018 chapter workshop – Boeing in Crystal City, VA. The 2019 Workshop theme is "Big Data: What's the Big Deal?", and in addition to a range of exciting speakers, we will also use this occasion as our annual chapter meeting – including a brief chapter board of directors update and presenting our chapter awards. Please plan to attend this all day event to learn, discuss, and network.

Chapter Luncheons

The chapter continues to offer a popular monthly lunchtime speaker series. Some of our recent presentations include:

- August 2018: *Social Media and Submarines: How Machine Learning and Unconventional Methods Can Change Cost Estimating*. Presented by **Omar Akbik** and **Jeffrey Pincus**. Held at Technomics, Inc., Arlington, VA.
- September *2018: Where Have All the Estimators Gone?* Presented by **Tom Dauber** and **Cris Shaw**. Held at Cobec Consulting, Washington, DC.
- October 2018: *Have All the Cost Estimates Already Been Done? Data Science in Cost Analysis*. Presented by **Jeremy Eden**. Held at Tecolote Research, Arlington, VA.
- November 2018: *Costing Blockchain*. Presented by **Harvey Reed**. Held at MITRE, McLean, VA.
- December 2018: *Portfolio Analysis Integration*. Presented by **Fana Gebeyehu-Houston**. Held at Technomics, Inc., Arlington, VA.

Stay tuned and watch your inbox for more information on these upcoming events. If you've missed any of our past luncheon presentations, they are often available on our website http://washingtoniceaa.com.

We are always looking for future luncheon speakers. If you have something you'd like to share with the local cost community or would like to practice for an upcoming presentation, we'd love to have you present at one of our events. We are also looking for a wider range of locations to hold our luncheons. If you are interested in being a speaker or your organization is interested in hosting, please contact our Program chair at ProgramChair@washingtoniceaa.com.