



Opening Remarks:

Welcome – Jeremy Stovall, CIAC President. The meeting started promptly at around 8:35 with the message from the President of the Construction Industry Advisory Council (CIAC), Mr. Jeremy Stovall, welcoming everyone in attendance. The welcoming message was divided into the following main ideas: Appreciated Dr. Suermann's ongoing work as COSC Department Head while informing the CIAC Board members that Dr. Suermann was in Florida attending family matters; Appreciation for all CIAC members taking some time off work to be present at the Board meeting and inviting all new attendees (around 25) to stand up and introduce themselves; Appreciation for the over 230 scholarships offered to COSC students totaling over \$450,000 for the year; and finally, giving a full overview of the agenda for the day. Mr. Stovall followed his opening remarks with the introduction of Dr. Jorge Vanegas, Dean of the College of Architecture

Dr. Jorge Vanegas, Dean, College of Architecture (COA) thanked Mr. Stovall for the introduction and started his presentation expressing his love for construction. He showed the board that he was wearing a Texas A&M Construction Science shirt and informed everyone he cancelled a trip to attend the CIAC board meeting. Dr. Vanegas gave a story about how he became Dean of the College of Architecture and how the department has grown since he first started. He has been the Dean of the COA and worked with three COSC Department Heads: Jim Smith, Joe Horlen and presently with Patrick Suermann. He reminded everyone that the College of Architecture (COA) turns fifty years old in 2019 and how the Department of Construction Science is the largest department within the COA. Part of the ongoing growth of the COA is the recently approved new major of Architectural Engineering. He informed the Board that due to ongoing growth of the COA there are various plans for physical expansion including a renovation of Langford Building C, a possible new wing to Francis Hall and many more potential opportunities for our College and Department to grow, such as CARC North. Dr. Vanegas followed up with a conversation about future programs such as the upcoming COA undergraduate curriculum changes: First Year Experience, Cultural Discourse courses and Meta Majors. He also shared with the group how our program has become a research



powerhouse in just a few years and because of this, we had faculty occupying the Center for Infrastructure Renewal (CIR) building where we were meeting for this Board meeting. He concluded his presentation by thanking the CIAC for all they have done for the department and said that our CIAC is the envy of all construction programs in the nation.

Anthony Marraro, Associate Department Head, Construction Science, opened his remarks with an appreciation of everyone in attendance and once again lamenting how Dr. Suermann couldn't be in attendance since he always has loved the opportunity to meet with our CIAC members. Mr. Marraro followed his presentation with updates on the following three topics: teaching, research and service.

#### TEACHING:

On teaching, Mr. Marraro informed the Board about the presentation they would get from Shelley Smith in a few minutes but gave a taste of the upcoming changes or curriculum enhancement. Changes which would allow our students to have more choices through electives and would allow for a better list of courses. He mentioned the program is always looking for a culture of diversity on both students and faculty.

#### RESEARCH:

In the Research subject, Mr. Marraro highlighted a few items such as:

- External research funding by T&TT faculty: ~\$1.3 million
- 11 internal T3 grants by T&TT faculty totaling more than \$300K
- 13 publications in peer-reviewed scientific journals and 13 in the COSC top-10
- Increased the number of Ph.D. students from 2-3 (a few years ago) to 18

#### SERVICE:

In the Service subject, Mr. Marraro highlighted a few items such as:

- Aggie BUILD



- Community Volunteers
- Construction Career Academies

Mr. Marraro went into a little detail explaining how the CIAC has supported Aggie BUILD over the years and how the Construction Career Academies continue to be as successful as they have been in part due to the CIAC's effort and donations. Mr. Marraro concluded his presentation by introducing Mr. Hernan Guerra.

Professor Hernan Guerra, Industry Relations Coordinator, started his remarks by expressing his appreciation for everyone in attendance, especially those new CIAC members who were able to participate in their first ever CIAC Board meeting. He continued his presentation by providing an update on two out of the three Vision items he has spoken about during the Fall 2018 CIAC Board meeting: Company Diversity and Early Engagement. In early engagement he mentioned some of the initiatives that had been done in order to achieve an early engagement within our construction science students and our CIAC companies. He informed the CIAC how invitations were sent to all freshmen and sophomore students to not only attend Career Fair but also visit the Industry Relations Office prior to the Career Fair. The goal was to create excitement within these students and incite the request of summer jobs through our CIAC members. He informed the Board that in the fall of 2018, 33% of all junior students seeking an internship had zero experience in the construction sector. While it may take a year or two to hopefully start seeing results, he was pleased by the large attendance of these lower level COSC students during the past Career Fair. Mr. Guerra then continued to explain his second initiative for early engagement, the rotation of the required field trips. In the past, the field trips had been assigned to various locations which seldom changed. For the last 2 semesters, there has been a rotation of CIAC member companies which allows them to "expand their brand". The rotation does not only include the member companies but also their market sector, trying to make sure there are always opportunities for students in the construction field of their choice.



Mr. Guerra then proceeded to welcome the new CIAC members who have joined since the last CIAC Board meeting held in October 2018.

New CIAC members – signed After Summer Luncheons

**Architectural Fabrication**

**Avinext**

**Booz Allen Hamilton**

**Bosworth Steel Erectors, Inc**

**C.A. Walker Constructions**

**Chamberlin Roofing & Waterproofing**

**Clune Construction**

**EDI Building Consultants, Inc.**

**Erdman Construction**

**F.A. Nunnally Co.**

**Freese and Nichols**

**Granite Construction**

**Herman & Kittle Properties, Inc.**

**Jim Cooper Construction Co., Inc.**

**King of Texas Roofing**

**MMC Corps**

**Moss & Associates**

**ONCOR Electric Delivery**

**Osburn Contractors**

**Prime Controls, LP**

**R.K. Hall LLC**

**S. Watts Group**

**Steve Hoegger & Associates**

**Streetlights Residential**

**TriFection Remodeling and Const.**

**Turner & Townsend**

**WBW Construction, LLC**

Following the presentation of the new CIAC members, Mr. Guerra then proceeded to update the Board on the CIAC Construction Market Diversity goals set forth in 2018. He explained how in July 2018, there were around 175 CIAC members and around 70% of these members were mainly commercial general contractors. Mr. Guerra explained how by the time he



started as Industry Relations Coordinator on September 1st, Mr. George Eustace had already welcomed over 15 new CIAC members which were already very diverse. The CIAC has added 44 companies since July 2018 and now sits at 219 members. One short of the goal of 220 but still a CIAC membership record. The new members have brought much more diversity to the type of construction market which now comprises our CIAC. The leading sector remains commercial general contractors, but is now 49% of our total CIAC membership. Below is the breakdown of the 44 companies added by both Mr. Eustace and Mr. Guerra since July 2018:

- 10 Commercial,
- 12 Specialty Subcontractors,
- 5 Residential,
- 6 Owner/Developer/CM,
- 4 Heavy Civil,
- 3 Industrial,
- 4 Consulting and or Technology

Mr. Guerra concluded the update from his 2018 IRO vision by creating **two** new goals: 1. continue to create new ways for early engagement of our COSC students with our CIAC members, 2 create strategies for CIAC company retention and 3. increase our partnership and networking opportunities.

Mr. Guerra then followed up his presentation by informing our CIAC members on the results of our COSC exit survey from the fall 2018 as it pertains to internships and employment data. See the summary results below:

❖ **Student Employment Data**

- 82% Have secured a job before graduation
- 90% had at least one job offer



- 91% plan to enter construction-related employment
- 70% **received** a job offer from their internship provider
- 43% **accepted** a job offer from their internship provider

❖ **Student Internship Employment Data**

- 127 Internship Students – Fall 2018
- 159 Internship Students – Spring 2019
- Average Salaries - \$16.72/hr
- Most Common hourly salary - \$17/hr
- Highest Salary (within the US) - \$28/hr
- Lowest Salary - \$12/hr

❖ **Student Full Time Sectors, Markets and Titles**

- Sectors in which students will be employed
  - 67% Commercial (up from 61%)
  - 6% Residential – Single Family (Internships at 10%)
  - 6% Oil/Gas/Energy
  - 4% Specialty
- Top 4 major Texas cities in which students will work upon graduation
  - 30% Houston (up from 29%)
  - 23% Dallas/Fort Worth (down from 28%)
  - 18% Austin (up from 13%)
  - 13% San Antonio (up from 5%)
  - 16% Other (including out of state)
- Top 3 job titles students will hold upon graduation



- 27% Project Engineer
- 15% Assistant Project Manager
- 8% Field Engineer (down from 13%)
- 8% Assistant Superintendent

❖ **Job Interviews and Full Time Offers**

Job Interviews

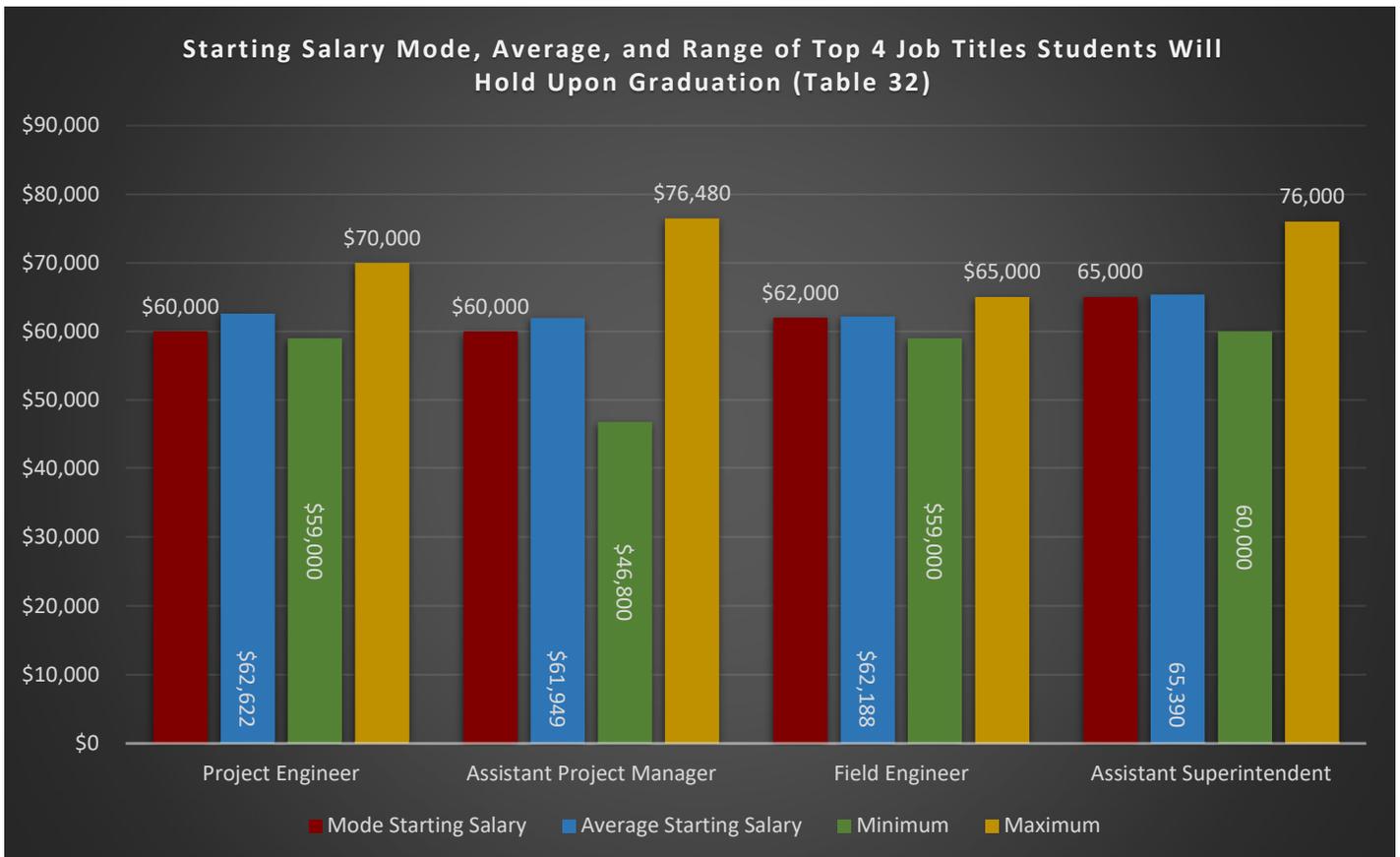
- At Career Fair
  - None: 2%
  - **One to Three: 44.4%**
  - **Four to Six: 34.3%**
  - Seven to Nine: 8.1%
  - 10 plus: 8.1%
- Second Round
  - None: 4%
  - **One to Three: 62.6%**
  - Four to Six: 25.3%
- Job Offers
  - None: 14.1%
  - **One: 19.2%**
  - Two: 26.3%
  - Three: 24.2%
  - Four/Plus: 16%

Salaries

- Average Starting Salary for all Positions
  - \$71,870 / year high
  - \$56,200 / year low
  - **\$63,037/ year**



- Highest Salary
  - \$95K for Project Manager Position
  - Bonus ranges
  - \$0 to \$9K



Professor Guerra concluded his presentation by informing all present on the important dates for the CIAC for the next three years and thanking everyone in attendance once again. Mr. Guerra then presented Shelley Smith, Texas A&M's Construction Science Undergraduate Director who gave an update on COSC's undergraduate curriculum changes.

Mrs. Smith started her presentation by informing the CIAC on the three major student success initiatives created by the University and College of Architecture. These are: The First



Year Experience (FYE), the Meta Majors and the Cultural Discourse class. These 3 initiatives are aimed to serve the following identified goals:

- Increase 1<sup>st</sup> year retention for full time students from 92% to 95%
- Increase four-year graduation rates from 56% to 65%
- Increase six-year graduation rates from 82% to 85%
- Decrease achievement disparities

The First Year Experience (FYE) is aimed at helping students transition to college. It has not been adopted but it is in the works for the upcoming years. The current plan of the FYE is to have all students take a number of topics in their first year regardless of their major. The list of eight topics to be covered over their first two semesters is:

- Accountability/Self and Goal Setting Awareness
- Social and Financial Wellbeing
- Diversity/Cultural Competence
- Professionalism/Career and Major Exploration
- Study Success Strategies
- Alcohol and Drug Awareness
- Stress Management
- Communication and Active Listening

Mrs. Smith then followed her presentation with an explanation of the meta-majors. The purpose of the meta-majors is to have all students in the College of Architecture be knowledgeable in certain topics again, regardless of their major. All members of the College Academic Affairs Committee responded to prompt with 47 outcomes or topics to be divided in the following five knowledge areas:

- Communication, Collaboration, Technology
- Design, Creativity, Innovation



- Analysis, Critical Thinking, Transdisciplinary
- Professionalism, Project Management, Leadership
- Ethics, Diversity, Social & Cultural Competence, Sustainability

Currently there has been more emphasis given to the top two knowledge area topics with subjects such as: communication, collaboration, technology, design, creativity and innovation. Mrs. Smith mentioned that there is currently no plan on how this will move forward since there are numerous challenges that have become apparent. The challenges were not described but Mrs. Smith mentioned the fact of each department losing valuable classes to make up for the meta-majors. Since there is that risk of losing valuable credit hours in COSC classes, the undergraduate curriculum committee has been meeting weekly to plan for the future and have more options available.

Mrs. Smith continued her presentation with the information on the cultural discourse class that will begin in the fall of 2019. The civil discourse class will give students an overview on certain contentious topics. All incoming freshman will be required to take the course. The class will be under CARC 101 and COSC Professor Debra Ellis is the department representative. Mrs. Ellis is not only working on developing the course but will also be teaching the class.

Mrs. Smith concluded her presentation with showing the CIAC members the curriculum proposal currently being revised by the undergraduate curriculum committee which she leads. The intent of the curriculum changes is to create options for our students through electives. Having more electives would also provide the program with more curriculum flexibility in case the meta-majors take effect in the future. She provided a slide which shows the possible changes to our current program.

Mrs. Smith's presentation was very well received by the CIAC board who had many questions and provided valuable input. Following the presentation given by Mrs. Smith, the group took



a 15 minute break starting at 9:50am in order for the rooms to be modified and adapted for the breakout sessions for each of the CIAC executive committees.

Following the break, the meeting resumed at 10:05 am with meetings of the various CIAC committees meeting in separate rooms for around 50 minutes. These CIAC committee meeting concluded at around 11:00 am. At 11:00 am, around 40 students arrived to be part of the student focus groups. Each class had around 10-12 students and were arranged in the following way:

- Freshmen/Sophomore Group – met with Membership Committee
- Junior Group – met with Development Committee
- Senior Group – met with Curriculum Committee
- Graduate Group – met with Graduate Program Curriculum, Research and Studies Committee

Each committee was asked to present a report on both CIAC discussions per committee and on the student focus groups after the lunch break. The student focus groups concluded at noon at which point CIAC members, faculty and staff, and students were invited to have lunch.

Immediately following the lunch break, Mr. Jeremy Stovall presented a \$25,000 check paid by the CIAC and made to the Aggie BUILD team per the approved CIAC budget for 2019. The COSC students who received the check on behalf of Aggie BUILD gave a brief presentation on what Aggie BUILD does and how they perform their work. The presentation of the check was following by a recognition of five of our current COSC First students who were in attendance during the entire CIAC board meeting.

The meeting continued at 1:20 pm with the updates provided by each of the committees.

**BUDGET COMMITTEE:**



Matt Summerville, The Brandt Companies, and Budget Committee Chair, started the presentation of his report by explaining what took place in the committee meeting. He continued by reviewing the 2019 budget status update for earned income item by item. He mentioned the 2019 budget had been approved in the fall 2018 for 180 total CIAC members with the current number of 219. Therefore there would be a surplus of around \$75,000 from CIAC membership. Nevertheless, the approved budget showed 4 lifetime memberships paid and to date we have received no lifetime membership applications. Mr. Summerville followed by reviewing all expenses to date. So far, the CIAC has paid the \$25,000 for student enrichment, \$17,000 for the annual banquet, \$25,000 for the research studies winner from last meeting, has pledged \$80,000 on endowed scholarship matches and \$20,000 on endowed professorship matches. The CIAC has also spent \$50,000 so far on a leadership endowed matching scholarship as approved on the 2019 budget, \$3,743 on the CIAC meeting, \$23,800 on the CIAC Career Fair and \$22,125 on credit card fees. All expensed are on budget with the exception of the CIAC Career Fair. In 2018 the CIAC approved \$30,000 for both the Spring and Fall Career Fairs and the cost has increased due to the number of companies attending, and the lower number of companies attending the non-CIAC member career fair.. Mr. Summerville then went into more detail by informing everyone present on an opportunity to do multiple CIAC endowed scholarship matches for one single donor without mentioning the donor's name. He explained how the CIAC would match a total of \$50,000 by using two lines from the budget, one for professorships which has an annual budgeted amount of \$20,000 and using the remaining \$30,000 from the \$120,000 budgeted for 2019 for endowed scholarships. Matt then informed everyone that the amount of money which would potentially be carried over to 2020 was \$200,293.

Mr. Summerville continued the presentation by reporting on the conversations for the 2019 Budget regarding the Francis Hall maintenance fund approved in October. Mr. Summerville informed the CIAC members that the \$95,000 approved for 2019 for the building maintenance fund was approved as an endowed fund which would give around \$3,800 per year in interest. He informed the CIAC Board that Dr. Suermann had submitted a draft Sustain, Remodel and Maintain (SRM) plan to the CIAC executive committee back in March.



The plan consists of line items which varied from tens of thousands of dollars to millions of dollars. The Francis Hall Maintenance is currently an endowed fund which limits the amount available to the department to the interest generated by the endowment.. Mr. Summerville then proceeded with requesting a motion to make the Francis Hall Maintenance account a capital fund in lieu of an endowed fund. This would allow the money to be used immediately if needed. The motion was brought up by the CIAC and voted in favor unanimously. Mr. Summerville concluded his presentation and presented Mr. Brent Ballard from the Curriculum Committee.

#### CURRICULUM COMMITTEE:

Mr. Brent Ballard, Marek Brothers, and Curriculum Committee Chair, started his report by informing the board that the executive committee under his direction had continued the conversations based on Mrs. Smith's earlier presentation. Mr. Ballard invited CIAC members to join the Faculty in the creation of the COSC electives being suggested by the undergraduate curriculum committee. Mr. Ballard mentioned the CIAC board agrees with the changes being proposed for our department.

Mr. Ballard then provided a summary of his committee's conversation with the senior students who attended the meeting. Mr. Ballard said there were no critics within the group since they all believed they were getting a "top notch" education. The students did say that although the program is very good, there are ways to improve. The senior students believed that they would have preferred better plan reading classes early on and this class being more intense. The seniors feel the department definitely listens to them. They believe there is a redundancy in some of the classes but again they feel their concerns are being addressed after sitting down in portions of today's meeting and listening to the changes discussed by Mrs. Smith during her presentation. The senior students believe there needs to be improvement in presentation classes which would allow them to be better public speakers. Students love how the industry is so involved in their education. Another improvement the



students mentioned was not on the program but on the company's internship managers. Students believe there is a disconnect in some companies between their human resources department and who will become their direct supervisor. This disconnect means that sometimes the student's expectations for their internship may not always be met. Mr. Ballard concluded his presentation by introducing Mr. Sterling King.

#### DEVELOPMENT COMMITTEE:

Mr. Sterling King from Core Construction, in representation of Mr. Tim Ross, Andrews-Myers and Development Committee Chair, started the presentation of his report by informing the board that the CIAC matched all 12 of the budgeted endowed scholarships for 2018 for the first time, giving credit to Texas A&M's Foundation work and possibly the CIAC's Development Committee initiative from Spring 2018 of the Maroon Envelope. Mr. King continued by expressing the Board's desire to make the Maroon Envelope a yearly item.

Mr. King continued his review by informing that Texas A&M's Faculty member Randy Birdwell had given a presentation to the committee of the Constructarium which Texas A&M students attend every year in London, UK. Mr. King said the CIAC is very interested in an initiative proposed by Texas A&M's Faculty member Debra Ellis to hold a Constructarium locally, using the RELLIS Campus location for potentially inviting teams to compete.

Mr. King then followed his presentation by providing a summary of his committee's conversation with the junior students who attended the focus group meetings. Mr. King said that students believe that their current concerns are already being addressed by the Department. Students want more opportunities for different classes and they specifically want more cost control classes offered. Students are also very interested in more hands on experiences and more opportunities to study abroad. Students are also requesting scholarship opportunities for the current and future study abroad programs since they believe the reason why so many students do not take advantage of such courses is they do not have



the means to attend. Mr. King said that the student's main concern is when multiple professors teach a similar class. They believe that the courses although named the same, do not contain the same content. Mr. King said the CIAC wants more uniformity on content for all similar classes. The junior students said their favorite class was COSC 175 and they specifically named Professor Jonathan Houston as they favorite professor. Mr. King concluded his student focus group summary by saying that junior students do not like online classes, a sentiment which the CIAC board shares with the students.

Mr. King concluded his presentation and introduced Mrs. Lauren Collins from the Membership Committee.

#### MEMBERSHIP COMMITTEE:

Lauren Collins, Kiewit, and Membership Committee Chair, provided the updates from both the membership committee meeting and the freshmen/sophomore student focus group's feedback. The membership committee started their work by reviewing the current procedures for selecting and awarding the Constructor Hall of Fame (CHOF) recipient. Based on their meeting the procedure recommendations for the Constructor Hall of Fame selection are listed below:

#### 1) Award Selection Criteria Discussion

- a. **Currently:** As of a 2019 change to reflect President Young's strategic imperatives, the CIAC will evaluate nominee's long term achievements in the following areas with respect to overall impact on the Construction Science Department: 1) Transformational Accomplishments i.e. titan in industry, leader in their field, evolved their businesses, achieved impossible success in the face of incredible odds 2) Discovery& Innovation i.e. pioneer in their field, informed risk taker, creativity, thirst for knowledge, revolutionary 3) Impact. i.e. emphasis on long term sustained support for COSC/CIAC, scholarship generosity, adjunct lecturer, service to Texas A&M



- b. **Recommendation** based on April 2019 Membership committee discussion/suggestions and March CIAC Executive Committee Meeting:
- i. The CIAC will evaluate nominee's long term achievements, personal ethics, and overall impact on the TAMU Construction Science Department and Construction Industry:
    1. 1) COSC Commitment - i.e. emphasis on long term, sustained support for COSC/CIAC; student focus; scholarship generosity; service to Texas A&M, etc.
    2. 2) Industry Impact - i.e. respected; leader in their field; notable achievements; creativity; thirst for knowledge

## 2) Selection Process Change Discussion

### a. Currently:

- i. The Executive Committee will propose a short list of three names of individuals (who meet requirements and are deserving) annually at the fall, in-person executive committee meeting.
- ii. The Membership Committee will evaluate the candidates according to the criteria above via an anonymous vote.
- iii. After tallying the votes from the committee, the individual receiving the highest score overall will be relayed to the CIAC President and Executive Director.
- iv. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.

### b. **Recommended process changes** based on April 2019 Membership committee discussion/suggestions:

- i. The Executive Director will post by Sept 1<sup>st</sup> annually on the COSC and ARCH websites as well as send out an email to CIAC members and COSC faculty requesting nominations for the CHFA award. Award summary, selection criteria, due date, past winners, and link for nomination submission will be included in the request for nominations.



- ii. Nominations will be collected via the COSC website or hardcopy/email before October 15<sup>th</sup> for discussion in the fall meeting to include: Nominator Name, Company, Phone, Email, Alumni Status & Year; Nominee Name, Company, Phone, Email, Alumni Status & Year (if known), 100 words or less: 1) Example(s) of their commitment to service and support of the COSC Dept. 2) Example(s) of leadership within their field or construction industry
- iii. The Executive Committee will evaluate the candidates during before the fall CIAC meeting according to the criteria above, using a 1-5 scale. All nominees with ratings will be submitted to the Membership Committee during the fall meeting.
- iv. The Membership Committee will select the winner during the fall meeting.
- v. The Membership Chair will share the committee's selection with the CIAC President, Executive Director, and Industry Relations Coordinator at the conclusion of the fall meeting.
- vi. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.
- vii. The Award winner will receive a plaque, invitation to speak at COSC capstone class/reception with Department Head/Dean, recognition in the COSC and ARCHONE Newsletters, and tickets to a fall Aggie football game. The Award Winner's name will also be placed on the CHFA Plaque in the COSC office.

Mrs. Collins continued her presentation by informing the CIAC that there were discussions on the possible changes to the CHOF display. Some of the changes proposed were to increase the size and change the location of the CHOF display and include photographs of the winners. There were conversations about having the CIAC create an endowed scholarship which will be given to a student each year in representation of the CHOF winner.



Mrs. Collins concluded her presentation by providing the student focus feedback from the freshmen and sophomore students who held a meeting with the membership committee and other CIAC members.

On the topic of Classes, Mrs. Collins said the students want the COSC175 Graphics class to prepare for estimating; not a focus on sketch up. The students said the class needs to use real plans and teach them how to read those plans. They believe the current course description online doesn't address "plan reading". The students were wondering if COSC 175 could be offered online since the current class was self-directed and lacking consistency amongst the sections. Students also want this class to prepare them for all construction industry sectors. Focus on reading plans, instead of how to draw it. Also how to implement changes, use the plans. Students were also asking if COSC 153 was part of the degree plan. They say students are not taking it but COSC 153 is still showing on the website. They want the website updated. Freshmen and sophomore students attending the meeting all said that Estimating 1 is their favorite class. Using on screen take off. These students also said that COSC 175 is also a favorite class and least favorite class and that is all based on the professor. Students believe that COSC 253 was a great introduction to the degree.

On the topic of Industry Involvement, Mrs. Collins said that students believe there is great industry/company involvement with the students. Students feel they have good access/knowledge on markets. Students say that companies who show students what they do are welcomed on campus. Freshmen and sophomore students believe that most of the guest lectures have been given by subcontractors. They also enjoy the jobsites tours.

On the topic of faculty, they believe that evaluations are effective in making changes. Students believe that faculty lacks consistency in course delivery. Faculty needs more guidelines around content delivery. Students believe that access to faculty is great and they want George Eustace to continue teaching. Overall, students believe they have great professors who give good course explanation and have very good connection with the students. They especially like how faculty use past real-life examples on their classes.



The following topics were also discussed although given a little less focus:

Academic Integrity:

- No issues with academic integrity.
- Internship is a great motivator to keep anyone from cheating.

College Readiness:

- High school doesn't prepare you. You have to learn to be successful on your own.
- Students were wondering about how construction could be presented as an option to high school counselors since they believe construction is not their focus.

Internship:

- Research on your own the market, company, job position. Researching on your phone while at career fair.

Mrs. Collins concluded her presentation and introduced Mr. Leland Rocchio from the Research Committee.

RESEARCH COMMITTEE:

Mr. Leland Rocchio, Jordan Foster, Graduate Program and Research Studies Committee Chair, started his report by informing the board on the progress made by Dr. Julian Kang on the research which was funded by the CIAC in 2019. Mr. Rocchio informed the CIAC that Dr. Julian Kang had used some of the money to buy a 3D printing machine and other portions to go out and request additional funds from elsewhere. Mr. Rocchio said that this is in alignment with the CIAC purpose to fund research **in the fact that the desire is to use this money to acquire additional funds**. Mr. Rocchio gave a review of the presentation given by Mr. Kang to the executive committee. The research is currently aimed at building emergency structures



which are to be printed in 3D and can be assembled quickly by a two person team without the need of heavy equipment. During the Fall 2018 CIAC board meeting, the executive committee explained the need for the structures to be able to store water for emergencies. The design is complete and Mr. Rocchio showed the board the first 3D printed scaled structures of what the building could look like. The building will hold and store water according to the CIAC's wishes. For the coming months, the intent is to have the full size structures printed elsewhere, and deliver them to campus next year where groups of students can assemble them in a competition and demonstrate how the structures will work and how these buildings would operate in the field.

Mr. Rocchio then followed his presentation by providing a summary of his committee's conversation with the graduate students who attended the focus group meeting. Graduate students all agreed that having a non-thesis option for the masters program was very beneficial and at this time 2/3 of the master students are in a non-thesis degree plan. Graduate students love the estimating class and would like more project management related courses. They believe that since most of them (if not all) come from a non-construction background, their biggest benefit would be in construction operation type classes. The graduate students had one complaint about the internship program. They want to have access to a longer internship such as COSC 494 or to a co-op program/class where they can study and work at the same time. They believe that there are no many opportunities for them to learn from hands on construction experiences and therefore their full time job offers are affected because of their lack of experience. Mr. Rocchio concluded his presentation and welcomed Mr. Stovall back to the podium.

After the presentations by all committees concluded, Mr. Jeremy Stovall presented Joe Horlen, previous COSC Department Head, who was in attendance to speak of and recognize the great work performed by George Eustace as Industry Relations Coordinator, Faculty Member and overall student mentor for over a decade. Mr. Horlen spoke about how Mr. Eustace had been able to have 3 full and successful careers: First as a naval officer for 21



years, then as a construction engineer and expert witness, and finally as a Texas A&M faculty member. Mr. Horlen continued his presentation providing a story about how he recruited Mr. Eustace to join the Texas A&M faculty twice, once when he was fully employed although a part time professor who was commuting from Houston for two semesters, and then two years later when he recruited Mr. Eustace to become the Industry Relations Coordinator and Senior Lecturer. Mr. Horlen explained how the ethics class was created by Mr. Eustace from scratch and how this class was adapted by the American Institute of Constructors (AIC) for their student competition years later. Mr. Horlen continued then talking about how Mr. Eustace had in a nutshell defined all the functions currently being done by the Industry Relations Coordinator and expanded the CIAC membership by over 100%. During his entire presentation, the screen showed some quotes by students who wrote about Mr. Eustace. Mr. Horlen did not read every single quote but he read one in particular. This quote is from a student: "He said from the very beginning that he is setting the bar high because Aggies have such high standards." Joe concluded his presentation by saying how George always pushed for high standards for our students and then presented George with a card from the department and a framed picture from the Navy.

Mr. Eustace then stood up to a standing ovation and approached the front of the room. Mr. Eustace shook Mr. Horlen's hand and received the recognition. Mr. Eustace then gave a short presentation on his time as Industry Relations Coordinator but started with a story on how he believed to have been lucky to gain admission to Texas A&M's as a faculty member. Mr. Eustace mentioned how after meeting Mr. Horlen he had applied for a faculty position but had been rejected initially. Only to have another faculty member resign close to the beginning of the semester and this prompted his hiring as a faculty member. The amount of work in his first year along with his full time job as an expert witness did not allow him to remain at the faculty position for long. Mr. Horlen then approached him two years later to offer him the position as Industry Relations Coordinator and the rest is history. Mr. Eustace at this time thanked all those CIAC members who had been loyal to the program and to the CIAC from the start and appreciated all those who joined since he took over. Mr. Eustace concluded his recognition speech by thanking all the staff throughout the years and saying



he believes we are in good hands to carry on the Industry Relations and CIAC great relationship.

At 2:20pm, Mr. Jeremy Stovall concluded the meeting by thanking everyone in attendance, thanking all the staff, especially Mrs. Sodolak and the leadership of Mr. Marraro and Mr. Guerra for the organization of the meeting.

The meeting adjourned at 2:30pm



Opening Remarks:

Welcome – Jeremy Stovall, CIAC President. The meeting started promptly at around 8:35 with the message from the President of the Construction Industry Advisory Council (CIAC), Mr. Jeremy Stovall, welcoming everyone in attendance. The welcoming message was divided into the following main ideas: Appreciated Dr. Suermann's ongoing work as COSC Department Head while informing the CIAC Board members that Dr. Suermann was in Florida attending family matters; Appreciation for all CIAC members taking some time off work to be present at the Board meeting and inviting all new attendees (around 25) to stand up and introduce themselves; Appreciation for the over 230 scholarships offered to COSC students totaling over \$450,000 for the year; and finally, giving a full overview of the agenda for the day. Mr. Stovall followed his opening remarks with the introduction of Dr. Jorge Vanegas, Dean of the College of Architecture

Dr. Jorge Vanegas, Dean, College of Architecture (COA) thanked Mr. Stovall for the introduction and started his presentation expressing his love for construction. He showed the board that he was wearing a Texas A&M Construction Science shirt and informed everyone he cancelled a trip to attend the CIAC board meeting. Dr. Vanegas gave a story about how he became Dean of the College of Architecture and how the department has grown since he first started. He has been the Dean of the COA and worked with three COSC Department Heads: Jim Smith, Joe Horlen and presently with Patrick Suermann. He reminded everyone that the College of Architecture (COA) turns fifty years old in 2019 and how the Department of Construction Science is the largest department within the COA. Part of the ongoing growth of the COA is the recently approved new major of Architectural Engineering. He informed the Board that due to ongoing growth of the COA there are various plans for physical expansion including a renovation of Langford Building C, a possible new wing to Francis Hall and many more potential opportunities for our College and Department to grow, such as CARC North. Dr. Vanegas followed up with a conversation about future programs such as the upcoming COA undergraduate curriculum changes: First Year Experience, Cultural Discourse courses and Meta Majors. He also shared with the group how our program has become a research



powerhouse in just a few years and because of this, we had faculty occupying the Center for Infrastructure Renewal (CIR) building where we were meeting for this Board meeting. He concluded his presentation by thanking the CIAC for all they have done for the department and said that our CIAC is the envy of all construction programs in the nation.

Anthony Marraro, Associate Department Head, Construction Science, opened his remarks with an appreciation of everyone in attendance and once again lamenting how Dr. Suermann couldn't be in attendance since he always has loved the opportunity to meet with our CIAC members. Mr. Marraro followed his presentation with updates on the following three topics: teaching, research and service.

#### TEACHING:

On teaching, Mr. Marraro informed the Board about the presentation they would get from Shelley Smith in a few minutes but gave a taste of the upcoming changes or curriculum enhancement. Changes which would allow our students to have more choices through electives and would allow for a better list of courses. He mentioned the program is always looking for a culture of diversity on both students and faculty.

#### RESEARCH:

In the Research subject, Mr. Marraro highlighted a few items such as:

- External research funding by T&TT faculty: ~\$1.3 million
- 11 internal T3 grants by T&TT faculty totaling more than \$300K
- 13 publications in peer-reviewed scientific journals and 13 in the COSC top-10
- Increased the number of Ph.D. students from 2-3 (a few years ago) to 18

#### SERVICE:

In the Service subject, Mr. Marraro highlighted a few items such as:

- Aggie BUILD



- Community Volunteers
- Construction Career Academies

Mr. Marraro went into a little detail explaining how the CIAC has supported Aggie BUILD over the years and how the Construction Career Academies continue to be as successful as they have been in part due to the CIAC's effort and donations. Mr. Marraro concluded his presentation by introducing Mr. Hernan Guerra.

Professor Hernan Guerra, Industry Relations Coordinator, started his remarks by expressing his appreciation for everyone in attendance, especially those new CIAC members who were able to participate in their first ever CIAC Board meeting. He continued his presentation by providing an update on two out of the three Vision items he has spoken about during the Fall 2018 CIAC Board meeting: Company Diversity and Early Engagement. In early engagement he mentioned some of the initiatives that had been done in order to achieve an early engagement within our construction science students and our CIAC companies. He informed the CIAC how invitations were sent to all freshmen and sophomore students to not only attend Career Fair but also visit the Industry Relations Office prior to the Career Fair. The goal was to create excitement within these students and incite the request of summer jobs through our CIAC members. He informed the Board that in the fall of 2018, 33% of all junior students seeking an internship had zero experience in the construction sector. While it may take a year or two to hopefully start seeing results, he was pleased by the large attendance of these lower level COSC students during the past Career Fair. Mr. Guerra then continued to explain his second initiative for early engagement, the rotation of the required field trips. In the past, the field trips had been assigned to various locations which seldom changed. For the last 2 semesters, there has been a rotation of CIAC member companies which allows them to "expand their brand". The rotation does not only include the member companies but also their market sector, trying to make sure there are always opportunities for students in the construction field of their choice.



Mr. Guerra then proceeded to welcome the new CIAC members who have joined since the last CIAC Board meeting held in October 2018.

New CIAC members – signed After Summer Luncheons

**Architectural Fabrication**

**Avinext**

**Booz Allen Hamilton**

**Bosworth Steel Erectors, Inc**

**C.A. Walker Constructions**

**Chamberlin Roofing & Waterproofing**

**Clune Construction**

**EDI Building Consultants, Inc.**

**Erdman Construction**

**F.A. Nunnally Co.**

**Freese and Nichols**

**Granite Construction**

**Herman & Kittle Properties, Inc.**

**Jim Cooper Construction Co., Inc.**

**King of Texas Roofing**

**MMC Corps**

**Moss & Associates**

**ONCOR Electric Delivery**

**Osburn Contractors**

**Prime Controls, LP**

**R.K. Hall LLC**

**S. Watts Group**

**Steve Hoegger & Associates**

**Streetlights Residential**

**TriFection Remodeling and Const.**

**Turner & Townsend**

**WBW Construction, LLC**

Following the presentation of the new CIAC members, Mr. Guerra then proceeded to update the Board on the CIAC Construction Market Diversity goals set forth in 2018. He explained how in July 2018, there were around 175 CIAC members and around 70% of these members were mainly commercial general contractors. Mr. Guerra explained how by the time he



started as Industry Relations Coordinator on September 1st, Mr. George Eustace had already welcomed over 15 new CIAC members which were already very diverse. The CIAC has added 44 companies since July 2018 and now sits at 219 members. One short of the goal of 220 but still a CIAC membership record. The new members have brought much more diversity to the type of construction market which now comprises our CIAC. The leading sector remains commercial general contractors, but is now 49% of our total CIAC membership. Below is the breakdown of the 44 companies added by both Mr. Eustace and Mr. Guerra since July 2018:

- 10 Commercial,
- 12 Specialty Subcontractors,
- 5 Residential,
- 6 Owner/Developer/CM,
- 4 Heavy Civil,
- 3 Industrial,
- 4 Consulting and or Technology

Mr. Guerra concluded the update from his 2018 IRO vision by creating **two** new goals: 1. continue to create new ways for early engagement of our COSC students with our CIAC members, 2 create strategies for CIAC company retention and 3. increase our partnership and networking opportunities.

Mr. Guerra then followed up his presentation by informing our CIAC members on the results of our COSC exit survey from the fall 2018 as it pertains to internships and employment data. See the summary results below:

❖ **Student Employment Data**

- 82% Have secured a job before graduation
- 90% had at least one job offer



- 91% plan to enter construction-related employment
- 70% **received** a job offer from their internship provider
- 43% **accepted** a job offer from their internship provider

❖ **Student Internship Employment Data**

- 127 Internship Students – Fall 2018
- 159 Internship Students – Spring 2019
- Average Salaries - \$16.72/hr
- Most Common hourly salary - \$17/hr
- Highest Salary (within the US) - \$28/hr
- Lowest Salary - \$12/hr

❖ **Student Full Time Sectors, Markets and Titles**

- Sectors in which students will be employed
  - 67% Commercial (up from 61%)
  - 6% Residential – Single Family (Internships at 10%)
  - 6% Oil/Gas/Energy
  - 4% Specialty
- Top 4 major Texas cities in which students will work upon graduation
  - 30% Houston (up from 29%)
  - 23% Dallas/Fort Worth (down from 28%)
  - 18% Austin (up from 13%)
  - 13% San Antonio (up from 5%)
  - 16% Other (including out of state)
- Top 3 job titles students will hold upon graduation



- 27% Project Engineer
- 15% Assistant Project Manager
- 8% Field Engineer (down from 13%)
- 8% Assistant Superintendent

❖ **Job Interviews and Full Time Offers**

Job Interviews

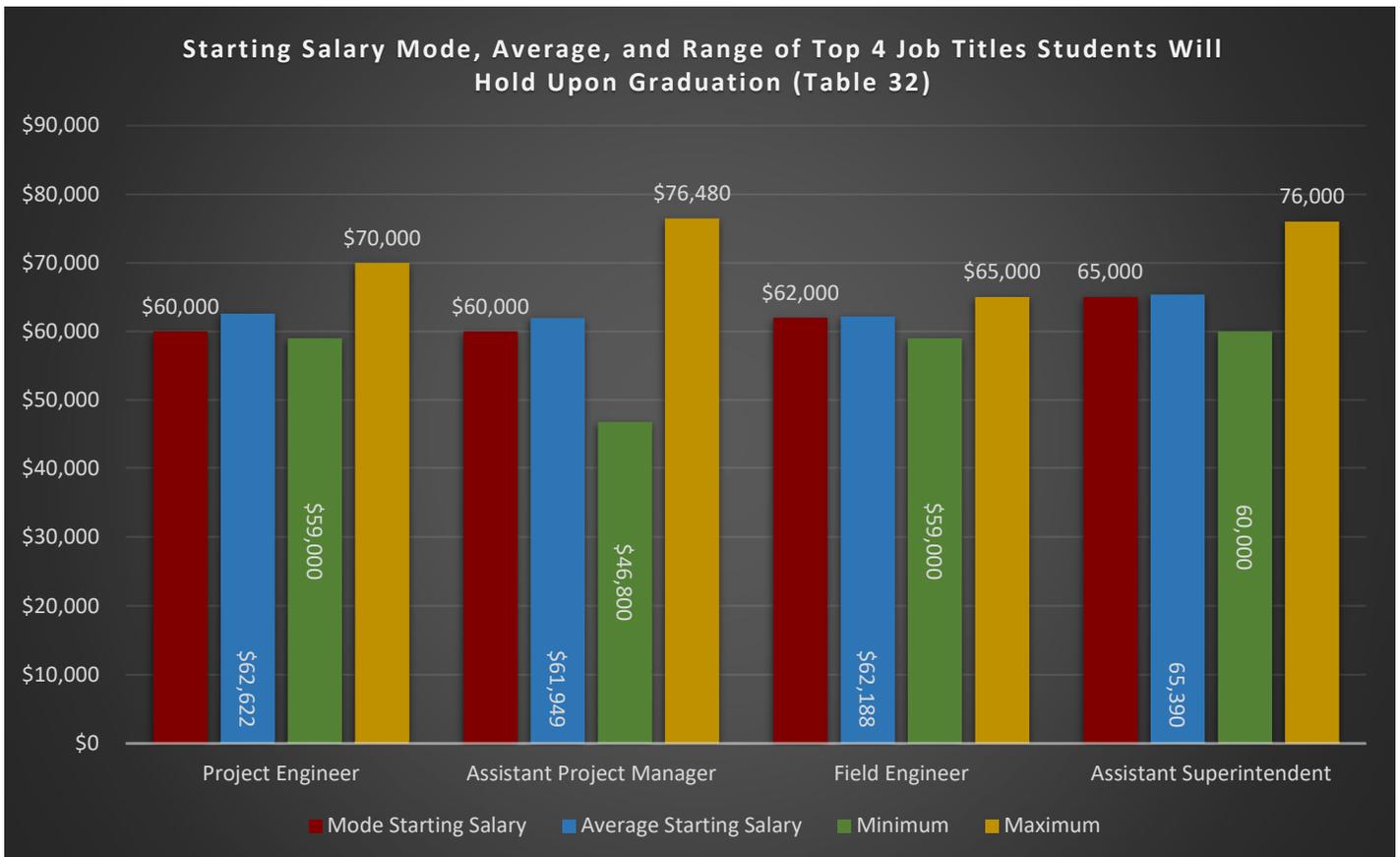
- At Career Fair
  - None: 2%
  - **One to Three: 44.4%**
  - **Four to Six: 34.3%**
  - Seven to Nine: 8.1%
  - 10 plus: 8.1%
- Second Round
  - None: 4%
  - **One to Three: 62.6%**
  - Four to Six: 25.3%
- Job Offers
  - None: 14.1%
  - **One: 19.2%**
  - Two: 26.3%
  - Three: 24.2%
  - Four/Plus: 16%

Salaries

- Average Starting Salary for all Positions
  - \$71,870 / year high
  - \$56,200 / year low
  - **\$63,037/ year**



- Highest Salary
  - \$95K for Project Manager Position
  - Bonus ranges
  - \$0 to \$9K



Professor Guerra concluded his presentation by informing all present on the important dates for the CIAC for the next three years and thanking everyone in attendance once again. Mr. Guerra then presented Shelley Smith, Texas A&M's Construction Science Undergraduate Director who gave an update on COSC's undergraduate curriculum changes.

Mrs. Smith started her presentation by informing the CIAC on the three major student success initiatives created by the University and College of Architecture. These are: The First



Year Experience (FYE), the Meta Majors and the Cultural Discourse class. These 3 initiatives are aimed to serve the following identified goals:

- Increase 1<sup>st</sup> year retention for full time students from 92% to 95%
- Increase four-year graduation rates from 56% to 65%
- Increase six-year graduation rates from 82% to 85%
- Decrease achievement disparities

The First Year Experience (FYE) is aimed at helping students transition to college. It has not been adopted but it is in the works for the upcoming years. The current plan of the FYE is to have all students take a number of topics in their first year regardless of their major. The list of eight topics to be covered over their first two semesters is:

- Accountability/Self and Goal Setting Awareness
- Social and Financial Wellbeing
- Diversity/Cultural Competence
- Professionalism/Career and Major Exploration
- Study Success Strategies
- Alcohol and Drug Awareness
- Stress Management
- Communication and Active Listening

Mrs. Smith then followed her presentation with an explanation of the meta-majors. The purpose of the meta-majors is to have all students in the College of Architecture be knowledgeable in certain topics again, regardless of their major. All members of the College Academic Affairs Committee responded to prompt with 47 outcomes or topics to be divided in the following five knowledge areas:

- Communication, Collaboration, Technology
- Design, Creativity, Innovation



- Analysis, Critical Thinking, Transdisciplinary
- Professionalism, Project Management, Leadership
- Ethics, Diversity, Social & Cultural Competence, Sustainability

Currently there has been more emphasis given to the top two knowledge area topics with subjects such as: communication, collaboration, technology, design, creativity and innovation. Mrs. Smith mentioned that there is currently no plan on how this will move forward since there are numerous challenges that have become apparent. The challenges were not described but Mrs. Smith mentioned the fact of each department losing valuable classes to make up for the meta-majors. Since there is that risk of losing valuable credit hours in COSC classes, the undergraduate curriculum committee has been meeting weekly to plan for the future and have more options available.

Mrs. Smith continued her presentation with the information on the cultural discourse class that will begin in the fall of 2019. The civil discourse class will give students an overview on certain contentious topics. All incoming freshman will be required to take the course. The class will be under CARC 101 and COSC Professor Debra Ellis is the department representative. Mrs. Ellis is not only working on developing the course but will also be teaching the class.

Mrs. Smith concluded her presentation with showing the CIAC members the curriculum proposal currently being revised by the undergraduate curriculum committee which she leads. The intent of the curriculum changes is to create options for our students through electives. Having more electives would also provide the program with more curriculum flexibility in case the meta-majors take effect in the future. She provided a slide which shows the possible changes to our current program.

Mrs. Smith's presentation was very well received by the CIAC board who had many questions and provided valuable input. Following the presentation given by Mrs. Smith, the group took



a 15 minute break starting at 9:50am in order for the rooms to be modified and adapted for the breakout sessions for each of the CIAC executive committees.

Following the break, the meeting resumed at 10:05 am with meetings of the various CIAC committees meeting in separate rooms for around 50 minutes. These CIAC committee meeting concluded at around 11:00 am. At 11:00 am, around 40 students arrived to be part of the student focus groups. Each class had around 10-12 students and were arranged in the following way:

- Freshmen/Sophomore Group – met with Membership Committee
- Junior Group – met with Development Committee
- Senior Group – met with Curriculum Committee
- Graduate Group – met with Graduate Program Curriculum, Research and Studies Committee

Each committee was asked to present a report on both CIAC discussions per committee and on the student focus groups after the lunch break. The student focus groups concluded at noon at which point CIAC members, faculty and staff, and students were invited to have lunch.

Immediately following the lunch break, Mr. Jeremy Stovall presented a \$25,000 check paid by the CIAC and made to the Aggie BUILD team per the approved CIAC budget for 2019. The COSC students who received the check on behalf of Aggie BUILD gave a brief presentation on what Aggie BUILD does and how they perform their work. The presentation of the check was following by a recognition of five of our current COSC First students who were in attendance during the entire CIAC board meeting.

The meeting continued at 1:20 pm with the updates provided by each of the committees.

**BUDGET COMMITTEE:**



Matt Summerville, The Brandt Companies, and Budget Committee Chair, started the presentation of his report by explaining what took place in the committee meeting. He continued by reviewing the 2019 budget status update for earned income item by item. He mentioned the 2019 budget had been approved in the fall 2018 for 180 total CIAC members with the current number of 219. Therefore there would be a surplus of around \$75,000 from CIAC membership. Nevertheless, the approved budget showed 4 lifetime memberships paid and to date we have received no lifetime membership applications. Mr. Summerville followed by reviewing all expenses to date. So far, the CIAC has paid the \$25,000 for student enrichment, \$17,000 for the annual banquet, \$25,000 for the research studies winner from last meeting, has pledged \$80,000 on endowed scholarship matches and \$20,000 on endowed professorship matches. The CIAC has also spent \$50,000 so far on a leadership endowed matching scholarship as approved on the 2019 budget, \$3,743 on the CIAC meeting, \$23,800 on the CIAC Career Fair and \$22,125 on credit card fees. All expensed are on budget with the exception of the CIAC Career Fair. In 2018 the CIAC approved \$30,000 for both the Spring and Fall Career Fairs and the cost has increased due to the number of companies attending, and the lower number of companies attending the non-CIAC member career fair.. Mr. Summerville then went into more detail by informing everyone present on an opportunity to do multiple CIAC endowed scholarship matches for one single donor without mentioning the donor's name. He explained how the CIAC would match a total of \$50,000 by using two lines from the budget, one for professorships which has an annual budgeted amount of \$20,000 and using the remaining \$30,000 from the \$120,000 budgeted for 2019 for endowed scholarships. Matt then informed everyone that the amount of money which would potentially be carried over to 2020 was \$200,293.

Mr. Summerville continued the presentation by reporting on the conversations for the 2019 Budget regarding the Francis Hall maintenance fund approved in October. Mr. Summerville informed the CIAC members that the \$95,000 approved for 2019 for the building maintenance fund was approved as an endowed fund which would give around \$3,800 per year in interest. He informed the CIAC Board that Dr. Suermann had submitted a draft Sustain, Remodel and Maintain (SRM) plan to the CIAC executive committee back in March.



The plan consists of line items which varied from tens of thousands of dollars to millions of dollars. The Francis Hall Maintenance is currently an endowed fund which limits the amount available to the department to the interest generated by the endowment.. Mr. Summerville then proceeded with requesting a motion to make the Francis Hall Maintenance account a capital fund in lieu of an endowed fund. This would allow the money to be used immediately if needed. The motion was brought up by the CIAC and voted in favor unanimously. Mr. Summerville concluded his presentation and presented Mr. Brent Ballard from the Curriculum Committee.

#### CURRICULUM COMMITTEE:

Mr. Brent Ballard, Marek Brothers, and Curriculum Committee Chair, started his report by informing the board that the executive committee under his direction had continued the conversations based on Mrs. Smith's earlier presentation. Mr. Ballard invited CIAC members to join the Faculty in the creation of the COSC electives being suggested by the undergraduate curriculum committee. Mr. Ballard mentioned the CIAC board agrees with the changes being proposed for our department.

Mr. Ballard then provided a summary of his committee's conversation with the senior students who attended the meeting. Mr. Ballard said there were no critics within the group since they all believed they were getting a "top notch" education. The students did say that although the program is very good, there are ways to improve. The senior students believed that they would have preferred better plan reading classes early on and this class being more intense. The seniors feel the department definitely listens to them. They believe there is a redundancy in some of the classes but again they feel their concerns are being addressed after sitting down in portions of today's meeting and listening to the changes discussed by Mrs. Smith during her presentation. The senior students believe there needs to be improvement in presentation classes which would allow them to be better public speakers. Students love how the industry is so involved in their education. Another improvement the



students mentioned was not on the program but on the company's internship managers. Students believe there is a disconnect in some companies between their human resources department and who will become their direct supervisor. This disconnect means that sometimes the student's expectations for their internship may not always be met. Mr. Ballard concluded his presentation by introducing Mr. Sterling King.

#### DEVELOPMENT COMMITTEE:

Mr. Sterling King from Core Construction, in representation of Mr. Tim Ross, Andrews-Myers and Development Committee Chair, started the presentation of his report by informing the board that the CIAC matched all 12 of the budgeted endowed scholarships for 2018 for the first time, giving credit to Texas A&M's Foundation work and possibly the CIAC's Development Committee initiative from Spring 2018 of the Maroon Envelope. Mr. King continued by expressing the Board's desire to make the Maroon Envelope a yearly item.

Mr. King continued his review by informing that Texas A&M's Faculty member Randy Birdwell had given a presentation to the committee of the Constructarium which Texas A&M students attend every year in London, UK. Mr. King said the CIAC is very interested in an initiative proposed by Texas A&M's Faculty member Debra Ellis to hold a Constructarium locally, using the RELLIS Campus location for potentially inviting teams to compete.

Mr. King then followed his presentation by providing a summary of his committee's conversation with the junior students who attended the focus group meetings. Mr. King said that students believe that their current concerns are already being addressed by the Department. Students want more opportunities for different classes and they specifically want more cost control classes offered. Students are also very interested in more hands on experiences and more opportunities to study abroad. Students are also requesting scholarship opportunities for the current and future study abroad programs since they believe the reason why so many students do not take advantage of such courses is they do not have



the means to attend. Mr. King said that the student's main concern is when multiple professors teach a similar class. They believe that the courses although named the same, do not contain the same content. Mr. King said the CIAC wants more uniformity on content for all similar classes. The junior students said their favorite class was COSC 175 and they specifically named Professor Jonathan Houston as they favorite professor. Mr. King concluded his student focus group summary by saying that junior students do not like online classes, a sentiment which the CIAC board shares with the students.

Mr. King concluded his presentation and introduced Mrs. Lauren Collins from the Membership Committee.

#### MEMBERSHIP COMMITTEE:

Lauren Collins, Kiewit, and Membership Committee Chair, provided the updates from both the membership committee meeting and the freshmen/sophomore student focus group's feedback. The membership committee started their work by reviewing the current procedures for selecting and awarding the Constructor Hall of Fame (CHOF) recipient. Based on their meeting the procedure recommendations for the Constructor Hall of Fame selection are listed below:

#### 1) Award Selection Criteria Discussion

- a. **Currently:** As of a 2019 change to reflect President Young's strategic imperatives, the CIAC will evaluate nominee's long term achievements in the following areas with respect to overall impact on the Construction Science Department: 1) Transformational Accomplishments i.e. titan in industry, leader in their field, evolved their businesses, achieved impossible success in the face of incredible odds 2) Discovery& Innovation i.e. pioneer in their field, informed risk taker, creativity, thirst for knowledge, revolutionary 3) Impact. i.e. emphasis on long term sustained support for COSC/CIAC, scholarship generosity, adjunct lecturer, service to Texas A&M



- b. **Recommendation** based on April 2019 Membership committee discussion/suggestions and March CIAC Executive Committee Meeting:
- i. The CIAC will evaluate nominee's long term achievements, personal ethics, and overall impact on the TAMU Construction Science Department and Construction Industry:
    1. 1) COSC Commitment - i.e. emphasis on long term, sustained support for COSC/CIAC; student focus; scholarship generosity; service to Texas A&M, etc.
    2. 2) Industry Impact - i.e. respected; leader in their field; notable achievements; creativity; thirst for knowledge

## 2) Selection Process Change Discussion

### a. Currently:

- i. The Executive Committee will propose a short list of three names of individuals (who meet requirements and are deserving) annually at the fall, in-person executive committee meeting.
- ii. The Membership Committee will evaluate the candidates according to the criteria above via an anonymous vote.
- iii. After tallying the votes from the committee, the individual receiving the highest score overall will be relayed to the CIAC President and Executive Director.
- iv. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.

### b. **Recommended process changes** based on April 2019 Membership committee discussion/suggestions:

- i. The Executive Director will post by Sept 1<sup>st</sup> annually on the COSC and ARCH websites as well as send out an email to CIAC members and COSC faculty requesting nominations for the CHFA award. Award summary, selection criteria, due date, past winners, and link for nomination submission will be included in the request for nominations.



- ii. Nominations will be collected via the COSC website or hardcopy/email before October 15<sup>th</sup> for discussion in the fall meeting to include: Nominator Name, Company, Phone, Email, Alumni Status & Year; Nominee Name, Company, Phone, Email, Alumni Status & Year (if known), 100 words or less: 1) Example(s) of their commitment to service and support of the COSC Dept. 2) Example(s) of leadership within their field or construction industry
- iii. The Executive Committee will evaluate the candidates during before the fall CIAC meeting according to the criteria above, using a 1-5 scale. All nominees with ratings will be submitted to the Membership Committee during the fall meeting.
- iv. The Membership Committee will select the winner during the fall meeting.
- v. The Membership Chair will share the committee's selection with the CIAC President, Executive Director, and Industry Relations Coordinator at the conclusion of the fall meeting.
- vi. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.
- vii. The Award winner will receive a plaque, invitation to speak at COSC capstone class/reception with Department Head/Dean, recognition in the COSC and ARCHONE Newsletters, and tickets to a fall Aggie football game. The Award Winner's name will also be placed on the CHFA Plaque in the COSC office.

Mrs. Collins continued her presentation by informing the CIAC that there were discussions on the possible changes to the CHOF display. Some of the changes proposed were to increase the size and change the location of the CHOF display and include photographs of the winners. There were conversations about having the CIAC create an endowed scholarship which will be given to a student each year in representation of the CHOF winner.



Mrs. Collins concluded her presentation by providing the student focus feedback from the freshmen and sophomore students who held a meeting with the membership committee and other CIAC members.

On the topic of Classes, Mrs. Collins said the students want the COSC175 Graphics class to prepare for estimating; not a focus on sketch up. The students said the class needs to use real plans and teach them how to read those plans. They believe the current course description online doesn't address "plan reading". The students were wondering if COSC 175 could be offered online since the current class was self-directed and lacking consistency amongst the sections. Students also want this class to prepare them for all construction industry sectors. Focus on reading plans, instead of how to draw it. Also how to implement changes, use the plans. Students were also asking if COSC 153 was part of the degree plan. They say students are not taking it but COSC 153 is still showing on the website. They want the website updated. Freshmen and sophomore students attending the meeting all said that Estimating 1 is their favorite class. Using on screen take off. These students also said that COSC 175 is also a favorite class and least favorite class and that is all based on the professor. Students believe that COSC 253 was a great introduction to the degree.

On the topic of Industry Involvement, Mrs. Collins said that students believe there is great industry/company involvement with the students. Students feel they have good access/knowledge on markets. Students say that companies who show students what they do are welcomed on campus. Freshmen and sophomore students believe that most of the guest lectures have been given by subcontractors. They also enjoy the jobsites tours.

On the topic of faculty, they believe that evaluations are effective in making changes. Students believe that faculty lacks consistency in course delivery. Faculty needs more guidelines around content delivery. Students believe that access to faculty is great and they want George Eustace to continue teaching. Overall, students believe they have great professors who give good course explanation and have very good connection with the students. They especially like how faculty use past real-life examples on their classes.



The following topics were also discussed although given a little less focus:

Academic Integrity:

- No issues with academic integrity.
- Internship is a great motivator to keep anyone from cheating.

College Readiness:

- High school doesn't prepare you. You have to learn to be successful on your own.
- Students were wondering about how construction could be presented as an option to high school counselors since they believe construction is not their focus.

Internship:

- Research on your own the market, company, job position. Researching on your phone while at career fair.

Mrs. Collins concluded her presentation and introduced Mr. Leland Rocchio from the Research Committee.

RESEARCH COMMITTEE:

Mr. Leland Rocchio, Jordan Foster, Graduate Program and Research Studies Committee Chair, started his report by informing the board on the progress made by Dr. Julian Kang on the research which was funded by the CIAC in 2019. Mr. Rocchio informed the CIAC that Dr. Julian Kang had used some of the money to buy a 3D printing machine and other portions to go out and request additional funds from elsewhere. Mr. Rocchio said that this is in alignment with the CIAC purpose to fund research **in the fact that the desire is to use this money to acquire additional funds**. Mr. Rocchio gave a review of the presentation given by Mr. Kang to the executive committee. The research is currently aimed at building emergency structures



which are to be printed in 3D and can be assembled quickly by a two person team without the need of heavy equipment. During the Fall 2018 CIAC board meeting, the executive committee explained the need for the structures to be able to store water for emergencies. The design is complete and Mr. Rocchio showed the board the first 3D printed scaled structures of what the building could look like. The building will hold and store water according to the CIAC's wishes. For the coming months, the intent is to have the full size structures printed elsewhere, and deliver them to campus next year where groups of students can assemble them in a competition and demonstrate how the structures will work and how these buildings would operate in the field.

Mr. Rocchio then followed his presentation by providing a summary of his committee's conversation with the graduate students who attended the focus group meeting. Graduate students all agreed that having a non-thesis option for the masters program was very beneficial and at this time 2/3 of the master students are in a non-thesis degree plan. Graduate students love the estimating class and would like more project management related courses. They believe that since most of them (if not all) come from a non-construction background, their biggest benefit would be in construction operation type classes. The graduate students had one complaint about the internship program. They want to have access to a longer internship such as COSC 494 or to a co-op program/class where they can study and work at the same time. They believe that there are no many opportunities for them to learn from hands on construction experiences and therefore their full time job offers are affected because of their lack of experience. Mr. Rocchio concluded his presentation and welcomed Mr. Stovall back to the podium.

After the presentations by all committees concluded, Mr. Jeremy Stovall presented Joe Horlen, previous COSC Department Head, who was in attendance to speak of and recognize the great work performed by George Eustace as Industry Relations Coordinator, Faculty Member and overall student mentor for over a decade. Mr. Horlen spoke about how Mr. Eustace had been able to have 3 full and successful careers: First as a naval officer for 21



years, then as a construction engineer and expert witness, and finally as a Texas A&M faculty member. Mr. Horlen continued his presentation providing a story about how he recruited Mr. Eustace to join the Texas A&M faculty twice, once when he was fully employed although a part time professor who was commuting from Houston for two semesters, and then two years later when he recruited Mr. Eustace to become the Industry Relations Coordinator and Senior Lecturer. Mr. Horlen explained how the ethics class was created by Mr. Eustace from scratch and how this class was adapted by the American Institute of Constructors (AIC) for their student competition years later. Mr. Horlen continued then talking about how Mr. Eustace had in a nutshell defined all the functions currently being done by the Industry Relations Coordinator and expanded the CIAC membership by over 100%. During his entire presentation, the screen showed some quotes by students who wrote about Mr. Eustace. Mr. Horlen did not read every single quote but he read one in particular. This quote is from a student: "He said from the very beginning that he is setting the bar high because Aggies have such high standards." Joe concluded his presentation by saying how George always pushed for high standards for our students and then presented George with a card from the department and a framed picture from the Navy.

Mr. Eustace then stood up to a standing ovation and approached the front of the room. Mr. Eustace shook Mr. Horlen's hand and received the recognition. Mr. Eustace then gave a short presentation on his time as Industry Relations Coordinator but started with a story on how he believed to have been lucky to gain admission to Texas A&M's as a faculty member. Mr. Eustace mentioned how after meeting Mr. Horlen he had applied for a faculty position but had been rejected initially. Only to have another faculty member resign close to the beginning of the semester and this prompted his hiring as a faculty member. The amount of work in his first year along with his full time job as an expert witness did not allow him to remain at the faculty position for long. Mr. Horlen then approached him two years later to offer him the position as Industry Relations Coordinator and the rest is history. Mr. Eustace at this time thanked all those CIAC members who had been loyal to the program and to the CIAC from the start and appreciated all those who joined since he took over. Mr. Eustace concluded his recognition speech by thanking all the staff throughout the years and saying



he believes we are in good hands to carry on the Industry Relations and CIAC great relationship.

At 2:20pm, Mr. Jeremy Stovall concluded the meeting by thanking everyone in attendance, thanking all the staff, especially Mrs. Sodolak and the leadership of Mr. Marraro and Mr. Guerra for the organization of the meeting.

The meeting adjourned at 2:30pm



Opening Remarks:

Welcome – Jeremy Stovall, CIAC President. The meeting started promptly at around 8:35 with the message from the President of the Construction Industry Advisory Council (CIAC), Mr. Jeremy Stovall, welcoming everyone in attendance. The welcoming message was divided into the following main ideas: Appreciated Dr. Suermann's ongoing work as COSC Department Head while informing the CIAC Board members that Dr. Suermann was in Florida attending family matters; Appreciation for all CIAC members taking some time off work to be present at the Board meeting and inviting all new attendees (around 25) to stand up and introduce themselves; Appreciation for the over 230 scholarships offered to COSC students totaling over \$450,000 for the year; and finally, giving a full overview of the agenda for the day. Mr. Stovall followed his opening remarks with the introduction of Dr. Jorge Vanegas, Dean of the College of Architecture

Dr. Jorge Vanegas, Dean, College of Architecture (COA) thanked Mr. Stovall for the introduction and started his presentation expressing his love for construction. He showed the board that he was wearing a Texas A&M Construction Science shirt and informed everyone he cancelled a trip to attend the CIAC board meeting. Dr. Vanegas gave a story about how he became Dean of the College of Architecture and how the department has grown since he first started. He has been the Dean of the COA and worked with three COSC Department Heads: Jim Smith, Joe Horlen and presently with Patrick Suermann. He reminded everyone that the College of Architecture (COA) turns fifty years old in 2019 and how the Department of Construction Science is the largest department within the COA. Part of the ongoing growth of the COA is the recently approved new major of Architectural Engineering. He informed the Board that due to ongoing growth of the COA there are various plans for physical expansion including a renovation of Langford Building C, a possible new wing to Francis Hall and many more potential opportunities for our College and Department to grow, such as CARC North. Dr. Vanegas followed up with a conversation about future programs such as the upcoming COA undergraduate curriculum changes: First Year Experience, Cultural Discourse courses and Meta Majors. He also shared with the group how our program has become a research



powerhouse in just a few years and because of this, we had faculty occupying the Center for Infrastructure Renewal (CIR) building where we were meeting for this Board meeting. He concluded his presentation by thanking the CIAC for all they have done for the department and said that our CIAC is the envy of all construction programs in the nation.

Anthony Marraro, Associate Department Head, Construction Science, opened his remarks with an appreciation of everyone in attendance and once again lamenting how Dr. Suermann couldn't be in attendance since he always has loved the opportunity to meet with our CIAC members. Mr. Marraro followed his presentation with updates on the following three topics: teaching, research and service.

#### TEACHING:

On teaching, Mr. Marraro informed the Board about the presentation they would get from Shelley Smith in a few minutes but gave a taste of the upcoming changes or curriculum enhancement. Changes which would allow our students to have more choices through electives and would allow for a better list of courses. He mentioned the program is always looking for a culture of diversity on both students and faculty.

#### RESEARCH:

In the Research subject, Mr. Marraro highlighted a few items such as:

- External research funding by T&TT faculty: ~\$1.3 million
- 11 internal T3 grants by T&TT faculty totaling more than \$300K
- 13 publications in peer-reviewed scientific journals and 13 in the COSC top-10
- Increased the number of Ph.D. students from 2-3 (a few years ago) to 18

#### SERVICE:

In the Service subject, Mr. Marraro highlighted a few items such as:

- Aggie BUILD



- Community Volunteers
- Construction Career Academies

Mr. Marraro went into a little detail explaining how the CIAC has supported Aggie BUILD over the years and how the Construction Career Academies continue to be as successful as they have been in part due to the CIAC's effort and donations. Mr. Marraro concluded his presentation by introducing Mr. Hernan Guerra.

Professor Hernan Guerra, Industry Relations Coordinator, started his remarks by expressing his appreciation for everyone in attendance, especially those new CIAC members who were able to participate in their first ever CIAC Board meeting. He continued his presentation by providing an update on two out of the three Vision items he has spoken about during the Fall 2018 CIAC Board meeting: Company Diversity and Early Engagement. In early engagement he mentioned some of the initiatives that had been done in order to achieve an early engagement within our construction science students and our CIAC companies. He informed the CIAC how invitations were sent to all freshmen and sophomore students to not only attend Career Fair but also visit the Industry Relations Office prior to the Career Fair. The goal was to create excitement within these students and incite the request of summer jobs through our CIAC members. He informed the Board that in the fall of 2018, 33% of all junior students seeking an internship had zero experience in the construction sector. While it may take a year or two to hopefully start seeing results, he was pleased by the large attendance of these lower level COSC students during the past Career Fair. Mr. Guerra then continued to explain his second initiative for early engagement, the rotation of the required field trips. In the past, the field trips had been assigned to various locations which seldom changed. For the last 2 semesters, there has been a rotation of CIAC member companies which allows them to "expand their brand". The rotation does not only include the member companies but also their market sector, trying to make sure there are always opportunities for students in the construction field of their choice.



Mr. Guerra then proceeded to welcome the new CIAC members who have joined since the last CIAC Board meeting held in October 2018.

New CIAC members – signed After Summer Luncheons

**Architectural Fabrication**

**Avinext**

**Booz Allen Hamilton**

**Bosworth Steel Erectors, Inc**

**C.A. Walker Constructions**

**Chamberlin Roofing & Waterproofing**

**Clune Construction**

**EDI Building Consultants, Inc.**

**Erdman Construction**

**F.A. Nunnally Co.**

**Freese and Nichols**

**Granite Construction**

**Herman & Kittle Properties, Inc.**

**Jim Cooper Construction Co., Inc.**

**King of Texas Roofing**

**MMC Corps**

**Moss & Associates**

**ONCOR Electric Delivery**

**Osburn Contractors**

**Prime Controls, LP**

**R.K. Hall LLC**

**S. Watts Group**

**Steve Hoegger & Associates**

**Streetlights Residential**

**TriFaction Remodeling and Const.**

**Turner & Townsend**

**WBW Construction, LLC**

Following the presentation of the new CIAC members, Mr. Guerra then proceeded to update the Board on the CIAC Construction Market Diversity goals set forth in 2018. He explained how in July 2018, there were around 175 CIAC members and around 70% of these members were mainly commercial general contractors. Mr. Guerra explained how by the time he



started as Industry Relations Coordinator on September 1st, Mr. George Eustace had already welcomed over 15 new CIAC members which were already very diverse. The CIAC has added 44 companies since July 2018 and now sits at 219 members. One short of the goal of 220 but still a CIAC membership record. The new members have brought much more diversity to the type of construction market which now comprises our CIAC. The leading sector remains commercial general contractors, but is now 49% of our total CIAC membership. Below is the breakdown of the 44 companies added by both Mr. Eustace and Mr. Guerra since July 2018:

- 10 Commercial,
- 12 Specialty Subcontractors,
- 5 Residential,
- 6 Owner/Developer/CM,
- 4 Heavy Civil,
- 3 Industrial,
- 4 Consulting and or Technology

Mr. Guerra concluded the update from his 2018 IRO vision by creating **two** new goals: 1. continue to create new ways for early engagement of our COSC students with our CIAC members, 2 create strategies for CIAC company retention and 3. increase our partnership and networking opportunities.

Mr. Guerra then followed up his presentation by informing our CIAC members on the results of our COSC exit survey from the fall 2018 as it pertains to internships and employment data. See the summary results below:

❖ **Student Employment Data**

- 82% Have secured a job before graduation
- 90% had at least one job offer



- 91% plan to enter construction-related employment
- 70% **received** a job offer from their internship provider
- 43% **accepted** a job offer from their internship provider

❖ **Student Internship Employment Data**

- *127 Internship Students – Fall 2018*
- *159 Internship Students – Spring 2019*
- *Average Salaries - \$16.72/hr*
- *Most Common hourly salary - \$17/hr*
- *Highest Salary (within the US) - \$28/hr*
- *Lowest Salary - \$12/hr*

❖ **Student Full Time Sectors, Markets and Titles**

- Sectors in which students will be employed
  - 67% Commercial (up from 61%)
  - 6% Residential – Single Family (Internships at 10%)
  - 6% Oil/Gas/Energy
  - 4% Specialty
- Top 4 major Texas cities in which students will work upon graduation
  - 30% Houston (up from 29%)
  - 23% Dallas/Fort Worth (down from 28%)
  - 18% Austin (up from 13%)
  - 13% San Antonio (up from 5%)
  - 16% Other (including out of state)
- Top 3 job titles students will hold upon graduation



- 27% Project Engineer
- 15% Assistant Project Manager
- 8% Field Engineer (down from 13%)
- 8% Assistant Superintendent

❖ **Job Interviews and Full Time Offers**

Job Interviews

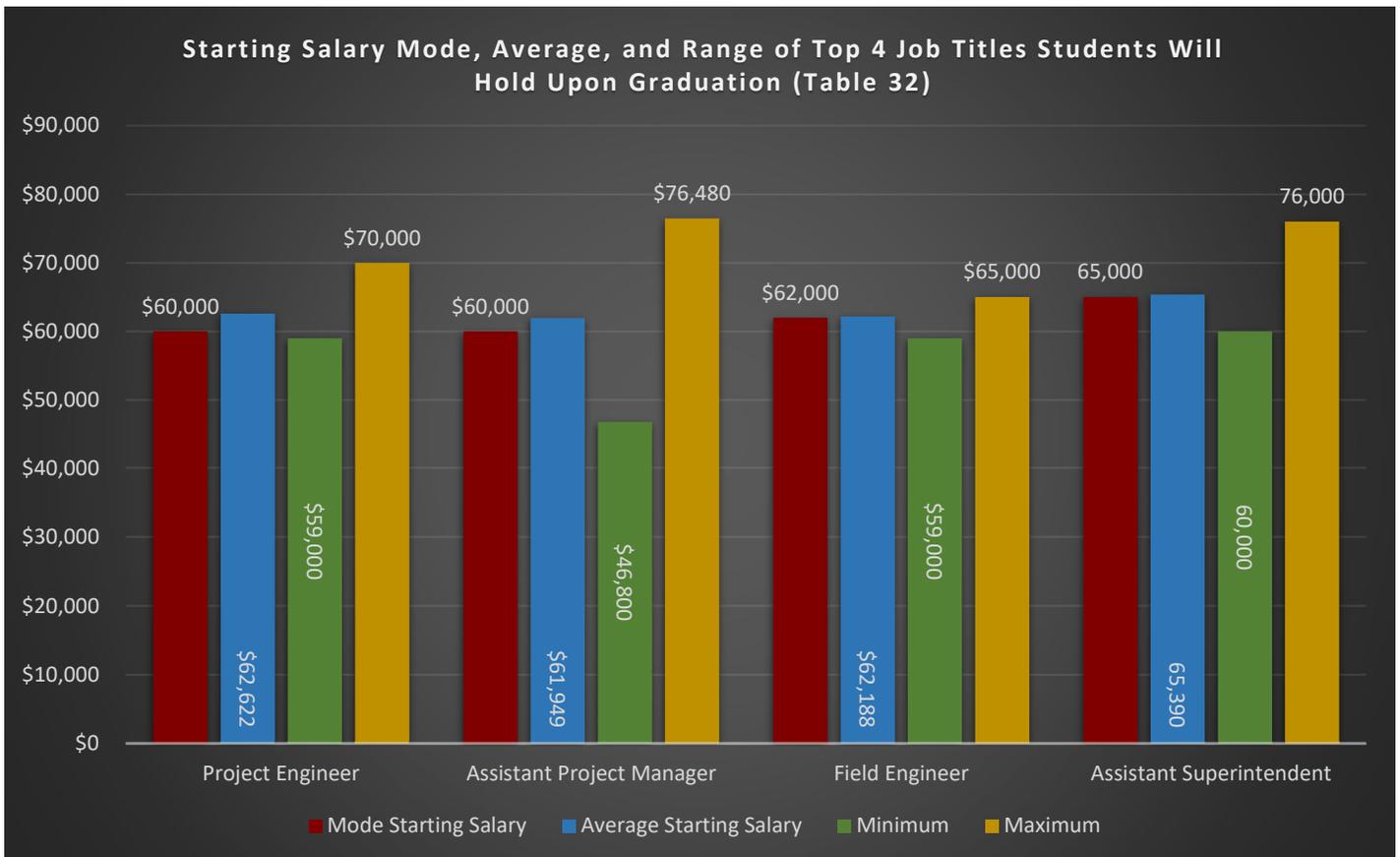
- At Career Fair
  - None: 2%
  - **One to Three: 44.4%**
  - **Four to Six: 34.3%**
  - Seven to Nine: 8.1%
  - 10 plus: 8.1%
- Second Round
  - None: 4%
  - **One to Three: 62.6%**
  - Four to Six: 25.3%
- Job Offers
  - None: 14.1%
  - **One: 19.2%**
  - Two: 26.3%
  - Three: 24.2%
  - Four/Plus: 16%

Salaries

- Average Starting Salary for all Positions
  - \$71,870 / year high
  - \$56,200 / year low
  - **\$63,037/ year**



- Highest Salary
  - \$95K for Project Manager Position
  - Bonus ranges
  - \$0 to \$9K



Professor Guerra concluded his presentation by informing all present on the important dates for the CIAC for the next three years and thanking everyone in attendance once again. Mr. Guerra then presented Shelley Smith, Texas A&M's Construction Science Undergraduate Director who gave an update on COSC's undergraduate curriculum changes.

Mrs. Smith started her presentation by informing the CIAC on the three major student success initiatives created by the University and College of Architecture. These are: The First



Year Experience (FYE), the Meta Majors and the Cultural Discourse class. These 3 initiatives are aimed to serve the following identified goals:

- Increase 1<sup>st</sup> year retention for full time students from 92% to 95%
- Increase four-year graduation rates from 56% to 65%
- Increase six-year graduation rates from 82% to 85%
- Decrease achievement disparities

The First Year Experience (FYE) is aimed at helping students transition to college. It has not been adopted but it is in the works for the upcoming years. The current plan of the FYE is to have all students take a number of topics in their first year regardless of their major. The list of eight topics to be covered over their first two semesters is:

- Accountability/Self and Goal Setting Awareness
- Social and Financial Wellbeing
- Diversity/Cultural Competence
- Professionalism/Career and Major Exploration
- Study Success Strategies
- Alcohol and Drug Awareness
- Stress Management
- Communication and Active Listening

Mrs. Smith then followed her presentation with an explanation of the meta-majors. The purpose of the meta-majors is to have all students in the College of Architecture be knowledgeable in certain topics again, regardless of their major. All members of the College Academic Affairs Committee responded to prompt with 47 outcomes or topics to be divided in the following five knowledge areas:

- Communication, Collaboration, Technology
- Design, Creativity, Innovation



- Analysis, Critical Thinking, Transdisciplinary
- Professionalism, Project Management, Leadership
- Ethics, Diversity, Social & Cultural Competence, Sustainability

Currently there has been more emphasis given to the top two knowledge area topics with subjects such as: communication, collaboration, technology, design, creativity and innovation. Mrs. Smith mentioned that there is currently no plan on how this will move forward since there are numerous challenges that have become apparent. The challenges were not described but Mrs. Smith mentioned the fact of each department losing valuable classes to make up for the meta-majors. Since there is that risk of losing valuable credit hours in COSC classes, the undergraduate curriculum committee has been meeting weekly to plan for the future and have more options available.

Mrs. Smith continued her presentation with the information on the cultural discourse class that will begin in the fall of 2019. The civil discourse class will give students an overview on certain contentious topics. All incoming freshman will be required to take the course. The class will be under CARC 101 and COSC Professor Debra Ellis is the department representative. Mrs. Ellis is not only working on developing the course but will also be teaching the class.

Mrs. Smith concluded her presentation with showing the CIAC members the curriculum proposal currently being revised by the undergraduate curriculum committee which she leads. The intent of the curriculum changes is to create options for our students through electives. Having more electives would also provide the program with more curriculum flexibility in case the meta-majors take effect in the future. She provided a slide which shows the possible changes to our current program.

Mrs. Smith's presentation was very well received by the CIAC board who had many questions and provided valuable input. Following the presentation given by Mrs. Smith, the group took



a 15 minute break starting at 9:50am in order for the rooms to be modified and adapted for the breakout sessions for each of the CIAC executive committees.

Following the break, the meeting resumed at 10:05 am with meetings of the various CIAC committees meeting in separate rooms for around 50 minutes. These CIAC committee meeting concluded at around 11:00 am. At 11:00 am, around 40 students arrived to be part of the student focus groups. Each class had around 10-12 students and were arranged in the following way:

- Freshmen/Sophomore Group – met with Membership Committee
- Junior Group – met with Development Committee
- Senior Group – met with Curriculum Committee
- Graduate Group – met with Graduate Program Curriculum, Research and Studies Committee

Each committee was asked to present a report on both CIAC discussions per committee and on the student focus groups after the lunch break. The student focus groups concluded at noon at which point CIAC members, faculty and staff, and students were invited to have lunch.

Immediately following the lunch break, Mr. Jeremy Stovall presented a \$25,000 check paid by the CIAC and made to the Aggie BUILD team per the approved CIAC budget for 2019. The COSC students who received the check on behalf of Aggie BUILD gave a brief presentation on what Aggie BUILD does and how they perform their work. The presentation of the check was following by a recognition of five of our current COSC First students who were in attendance during the entire CIAC board meeting.

The meeting continued at 1:20 pm with the updates provided by each of the committees.

**BUDGET COMMITTEE:**



Matt Summerville, The Brandt Companies, and Budget Committee Chair, started the presentation of his report by explaining what took place in the committee meeting. He continued by reviewing the 2019 budget status update for earned income item by item. He mentioned the 2019 budget had been approved in the fall 2018 for 180 total CIAC members with the current number of 219. Therefore there would be a surplus of around \$75,000 from CIAC membership. Nevertheless, the approved budget showed 4 lifetime memberships paid and to date we have received no lifetime membership applications. Mr. Summerville followed by reviewing all expenses to date. So far, the CIAC has paid the \$25,000 for student enrichment, \$17,000 for the annual banquet, \$25,000 for the research studies winner from last meeting, has pledged \$80,000 on endowed scholarship matches and \$20,000 on endowed professorship matches. The CIAC has also spent \$50,000 so far on a leadership endowed matching scholarship as approved on the 2019 budget, \$3,743 on the CIAC meeting, \$23,800 on the CIAC Career Fair and \$22,125 on credit card fees. All expensed are on budget with the exception of the CIAC Career Fair. In 2018 the CIAC approved \$30,000 for both the Spring and Fall Career Fairs and the cost has increased due to the number of companies attending, and the lower number of companies attending the non-CIAC member career fair.. Mr. Summerville then went into more detail by informing everyone present on an opportunity to do multiple CIAC endowed scholarship matches for one single donor without mentioning the donor's name. He explained how the CIAC would match a total of \$50,000 by using two lines from the budget, one for professorships which has an annual budgeted amount of \$20,000 and using the remaining \$30,000 from the \$120,000 budgeted for 2019 for endowed scholarships. Matt then informed everyone that the amount of money which would potentially be carried over to 2020 was \$200,293.

Mr. Summerville continued the presentation by reporting on the conversations for the 2019 Budget regarding the Francis Hall maintenance fund approved in October. Mr. Summerville informed the CIAC members that the \$95,000 approved for 2019 for the building maintenance fund was approved as an endowed fund which would give around \$3,800 per year in interest. He informed the CIAC Board that Dr. Suermann had submitted a draft Sustain, Remodel and Maintain (SRM) plan to the CIAC executive committee back in March.



The plan consists of line items which varied from tens of thousands of dollars to millions of dollars. The Francis Hall Maintenance is currently an endowed fund which limits the amount available to the department to the interest generated by the endowment.. Mr. Summerville then proceeded with requesting a motion to make the Francis Hall Maintenance account a capital fund in lieu of an endowed fund. This would allow the money to be used immediately if needed. The motion was brought up by the CIAC and voted in favor unanimously. Mr. Summerville concluded his presentation and presented Mr. Brent Ballard from the Curriculum Committee.

#### CURRICULUM COMMITTEE:

Mr. Brent Ballard, Marek Brothers, and Curriculum Committee Chair, started his report by informing the board that the executive committee under his direction had continued the conversations based on Mrs. Smith's earlier presentation. Mr. Ballard invited CIAC members to join the Faculty in the creation of the COSC electives being suggested by the undergraduate curriculum committee. Mr. Ballard mentioned the CIAC board agrees with the changes being proposed for our department.

Mr. Ballard then provided a summary of his committee's conversation with the senior students who attended the meeting. Mr. Ballard said there were no critics within the group since they all believed they were getting a "top notch" education. The students did say that although the program is very good, there are ways to improve. The senior students believed that they would have preferred better plan reading classes early on and this class being more intense. The seniors feel the department definitely listens to them. They believe there is a redundancy in some of the classes but again they feel their concerns are being addressed after sitting down in portions of today's meeting and listening to the changes discussed by Mrs. Smith during her presentation. The senior students believe there needs to be improvement in presentation classes which would allow them to be better public speakers. Students love how the industry is so involved in their education. Another improvement the



students mentioned was not on the program but on the company's internship managers. Students believe there is a disconnect in some companies between their human resources department and who will become their direct supervisor. This disconnect means that sometimes the student's expectations for their internship may not always be met. Mr. Ballard concluded his presentation by introducing Mr. Sterling King.

#### DEVELOPMENT COMMITTEE:

Mr. Sterling King from Core Construction, in representation of Mr. Tim Ross, Andrews-Myers and Development Committee Chair, started the presentation of his report by informing the board that the CIAC matched all 12 of the budgeted endowed scholarships for 2018 for the first time, giving credit to Texas A&M's Foundation work and possibly the CIAC's Development Committee initiative from Spring 2018 of the Maroon Envelope. Mr. King continued by expressing the Board's desire to make the Maroon Envelope a yearly item.

Mr. King continued his review by informing that Texas A&M's Faculty member Randy Birdwell had given a presentation to the committee of the Constructarium which Texas A&M students attend every year in London, UK. Mr. King said the CIAC is very interested in an initiative proposed by Texas A&M's Faculty member Debra Ellis to hold a Constructarium locally, using the RELLIS Campus location for potentially inviting teams to compete.

Mr. King then followed his presentation by providing a summary of his committee's conversation with the junior students who attended the focus group meetings. Mr. King said that students believe that their current concerns are already being addressed by the Department. Students want more opportunities for different classes and they specifically want more cost control classes offered. Students are also very interested in more hands on experiences and more opportunities to study abroad. Students are also requesting scholarship opportunities for the current and future study abroad programs since they believe the reason why so many students do not take advantage of such courses is they do not have



the means to attend. Mr. King said that the student's main concern is when multiple professors teach a similar class. They believe that the courses although named the same, do not contain the same content. Mr. King said the CIAC wants more uniformity on content for all similar classes. The junior students said their favorite class was COSC 175 and they specifically named Professor Jonathan Houston as they favorite professor. Mr. King concluded his student focus group summary by saying that junior students do not like online classes, a sentiment which the CIAC board shares with the students.

Mr. King concluded his presentation and introduced Mrs. Lauren Collins from the Membership Committee.

#### MEMBERSHIP COMMITTEE:

Lauren Collins, Kiewit, and Membership Committee Chair, provided the updates from both the membership committee meeting and the freshmen/sophomore student focus group's feedback. The membership committee started their work by reviewing the current procedures for selecting and awarding the Constructor Hall of Fame (CHOF) recipient. Based on their meeting the procedure recommendations for the Constructor Hall of Fame selection are listed below:

#### 1) Award Selection Criteria Discussion

- a. **Currently:** As of a 2019 change to reflect President Young's strategic imperatives, the CIAC will evaluate nominee's long term achievements in the following areas with respect to overall impact on the Construction Science Department: 1) Transformational Accomplishments i.e. titan in industry, leader in their field, evolved their businesses, achieved impossible success in the face of incredible odds 2) Discovery& Innovation i.e. pioneer in their field, informed risk taker, creativity, thirst for knowledge, revolutionary 3) Impact. i.e. emphasis on long term sustained support for COSC/CIAC, scholarship generosity, adjunct lecturer, service to Texas A&M



- b. **Recommendation** based on April 2019 Membership committee discussion/suggestions and March CIAC Executive Committee Meeting:
  - i. The CIAC will evaluate nominee's long term achievements, personal ethics, and overall impact on the TAMU Construction Science Department and Construction Industry:
    - 1. 1) COSC Commitment - i.e. emphasis on long term, sustained support for COSC/CIAC; student focus; scholarship generosity; service to Texas A&M, etc.
    - 2. 2) Industry Impact - i.e. respected; leader in their field; notable achievements; creativity; thirst for knowledge

## 2) Selection Process Change Discussion

### a. Currently:

- i. The Executive Committee will propose a short list of three names of individuals (who meet requirements and are deserving) annually at the fall, in-person executive committee meeting.
- ii. The Membership Committee will evaluate the candidates according to the criteria above via an anonymous vote.
- iii. After tallying the votes from the committee, the individual receiving the highest score overall will be relayed to the CIAC President and Executive Director.
- iv. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.

### b. **Recommended process changes** based on April 2019 Membership committee discussion/suggestions:

- i. The Executive Director will post by Sept 1<sup>st</sup> annually on the COSC and ARCH websites as well as send out an email to CIAC members and COSC faculty requesting nominations for the CHFA award. Award summary, selection criteria, due date, past winners, and link for nomination submission will be included in the request for nominations.



- ii. Nominations will be collected via the COSC website or hardcopy/email before October 15<sup>th</sup> for discussion in the fall meeting to include: Nominator Name, Company, Phone, Email, Alumni Status & Year; Nominee Name, Company, Phone, Email, Alumni Status & Year (if known), 100 words or less: 1) Example(s) of their commitment to service and support of the COSC Dept. 2) Example(s) of leadership within their field or construction industry
- iii. The Executive Committee will evaluate the candidates during before the fall CIAC meeting according to the criteria above, using a 1-5 scale. All nominees with ratings will be submitted to the Membership Committee during the fall meeting.
- iv. The Membership Committee will select the winner during the fall meeting.
- v. The Membership Chair will share the committee's selection with the CIAC President, Executive Director, and Industry Relations Coordinator at the conclusion of the fall meeting.
- vi. The CIAC President and Executive Director will invite an appropriate presenter and the winner to the spring CIAC banquet as soon as possible, with the expectation that the recipient will be able to plan for and attend the banquet to receive their award.
- vii. The Award winner will receive a plaque, invitation to speak at COSC capstone class/reception with Department Head/Dean, recognition in the COSC and ARCHONE Newsletters, and tickets to a fall Aggie football game. The Award Winner's name will also be placed on the CHFA Plaque in the COSC office.

Mrs. Collins continued her presentation by informing the CIAC that there were discussions on the possible changes to the CHOF display. Some of the changes proposed were to increase the size and change the location of the CHOF display and include photographs of the winners. There were conversations about having the CIAC create an endowed scholarship which will be given to a student each year in representation of the CHOF winner.



Mrs. Collins concluded her presentation by providing the student focus feedback from the freshmen and sophomore students who held a meeting with the membership committee and other CIAC members.

On the topic of Classes, Mrs. Collins said the students want the COSC175 Graphics class to prepare for estimating; not a focus on sketch up. The students said the class needs to use real plans and teach them how to read those plans. They believe the current course description online doesn't address "plan reading". The students were wondering if COSC 175 could be offered online since the current class was self-directed and lacking consistency amongst the sections. Students also want this class to prepare them for all construction industry sectors. Focus on reading plans, instead of how to draw it. Also how to implement changes, use the plans. Students were also asking if COSC 153 was part of the degree plan. They say students are not taking it but COSC 153 is still showing on the website. They want the website updated. Freshmen and sophomore students attending the meeting all said that Estimating 1 is their favorite class. Using on screen take off. These students also said that COSC 175 is also a favorite class and least favorite class and that is all based on the professor. Students believe that COSC 253 was a great introduction to the degree.

On the topic of Industry Involvement, Mrs. Collins said that students believe there is great industry/company involvement with the students. Students feel they have good access/knowledge on markets. Students say that companies who show students what they do are welcomed on campus. Freshmen and sophomore students believe that most of the guest lectures have been given by subcontractors. They also enjoy the jobsites tours.

On the topic of faculty, they believe that evaluations are effective in making changes. Students believe that faculty lacks consistency in course delivery. Faculty needs more guidelines around content delivery. Students believe that access to faculty is great and they want George Eustace to continue teaching. Overall, students believe they have great professors who give good course explanation and have very good connection with the students. They especially like how faculty use past real-life examples on their classes.



The following topics were also discussed although given a little less focus:

Academic Integrity:

- No issues with academic integrity.
- Internship is a great motivator to keep anyone from cheating.

College Readiness:

- High school doesn't prepare you. You have to learn to be successful on your own.
- Students were wondering about how construction could be presented as an option to high school counselors since they believe construction is not their focus.

Internship:

- Research on your own the market, company, job position. Researching on your phone while at career fair.

Mrs. Collins concluded her presentation and introduced Mr. Leland Rocchio from the Research Committee.

RESEARCH COMMITTEE:

Mr. Leland Rocchio, Jordan Foster, Graduate Program and Research Studies Committee Chair, started his report by informing the board on the progress made by Dr. Julian Kang on the research which was funded by the CIAC in 2019. Mr. Rocchio informed the CIAC that Dr. Julian Kang had used some of the money to buy a 3D printing machine and other portions to go out and request additional funds from elsewhere. Mr. Rocchio said that this is in alignment with the CIAC purpose to fund research **in the fact that the desire is to use this money to acquire additional funds**. Mr. Rocchio gave a review of the presentation given by Mr. Kang to the executive committee. The research is currently aimed at building emergency structures



which are to be printed in 3D and can be assembled quickly by a two person team without the need of heavy equipment. During the Fall 2018 CIAC board meeting, the executive committee explained the need for the structures to be able to store water for emergencies. The design is complete and Mr. Rocchio showed the board the first 3D printed scaled structures of what the building could look like. The building will hold and store water according to the CIAC's wishes. For the coming months, the intent is to have the full size structures printed elsewhere, and deliver them to campus next year where groups of students can assemble them in a competition and demonstrate how the structures will work and how these buildings would operate in the field.

Mr. Rocchio then followed his presentation by providing a summary of his committee's conversation with the graduate students who attended the focus group meeting. Graduate students all agreed that having a non-thesis option for the masters program was very beneficial and at this time 2/3 of the master students are in a non-thesis degree plan. Graduate students love the estimating class and would like more project management related courses. They believe that since most of them (if not all) come from a non-construction background, their biggest benefit would be in construction operation type classes. The graduate students had one complaint about the internship program. They want to have access to a longer internship such as COSC 494 or to a co-op program/class where they can study and work at the same time. They believe that there are no many opportunities for them to learn from hands on construction experiences and therefore their full time job offers are affected because of their lack of experience. Mr. Rocchio concluded his presentation and welcomed Mr. Stovall back to the podium.

After the presentations by all committees concluded, Mr. Jeremy Stovall presented Joe Horlen, previous COSC Department Head, who was in attendance to speak of and recognize the great work performed by George Eustace as Industry Relations Coordinator, Faculty Member and overall student mentor for over a decade. Mr. Horlen spoke about how Mr. Eustace had been able to have 3 full and successful careers: First as a naval officer for 21



years, then as a construction engineer and expert witness, and finally as a Texas A&M faculty member. Mr. Horlen continued his presentation providing a story about how he recruited Mr. Eustace to join the Texas A&M faculty twice, once when he was fully employed although a part time professor who was commuting from Houston for two semesters, and then two years later when he recruited Mr. Eustace to become the Industry Relations Coordinator and Senior Lecturer. Mr. Horlen explained how the ethics class was created by Mr. Eustace from scratch and how this class was adapted by the American Institute of Constructors (AIC) for their student competition years later. Mr. Horlen continued then talking about how Mr. Eustace had in a nutshell defined all the functions currently being done by the Industry Relations Coordinator and expanded the CIAC membership by over 100%. During his entire presentation, the screen showed some quotes by students who wrote about Mr. Eustace. Mr. Horlen did not read every single quote but he read one in particular. This quote is from a student: "He said from the very beginning that he is setting the bar high because Aggies have such high standards." Joe concluded his presentation by saying how George always pushed for high standards for our students and then presented George with a card from the department and a framed picture from the Navy.

Mr. Eustace then stood up to a standing ovation and approached the front of the room. Mr. Eustace shook Mr. Horlen's hand and received the recognition. Mr. Eustace then gave a short presentation on his time as Industry Relations Coordinator but started with a story on how he believed to have been lucky to gain admission to Texas A&M's as a faculty member. Mr. Eustace mentioned how after meeting Mr. Horlen he had applied for a faculty position but had been rejected initially. Only to have another faculty member resign close to the beginning of the semester and this prompted his hiring as a faculty member. The amount of work in his first year along with his full time job as an expert witness did not allow him to remain at the faculty position for long. Mr. Horlen then approached him two years later to offer him the position as Industry Relations Coordinator and the rest is history. Mr. Eustace at this time thanked all those CIAC members who had been loyal to the program and to the CIAC from the start and appreciated all those who joined since he took over. Mr. Eustace concluded his recognition speech by thanking all the staff throughout the years and saying



he believes we are in good hands to carry on the Industry Relations and CIAC great relationship.

At 2:20pm, Mr. Jeremy Stovall concluded the meeting by thanking everyone in attendance, thanking all the staff, especially Mrs. Sodolak and the leadership of Mr. Marraro and Mr. Guerra for the organization of the meeting.

The meeting adjourned at 2:30pm