Introduction

1. The Construction Science Department’s Strategic Plan is to provide purpose and direction for the department. It sets priorities and provides a common vision that every member of the department should consider in their day to day activities. This strategic plan was adopted by a faculty unanimous vote on February 10, 2011.

2. The goals and objectives set forth in this plan demonstrate our commitment to excellence in construction education, research, and service and intentions. To the extent that excellence is to be achieved we must be mindful that we have few peers against which our metrics can be compared. We must therefore continually improve on our own past performance and compare ourselves continually against our own past performance and against our strongest peer institutions.

3. This document contains the goals of the Department for the five year period beginning on the date of adoption and continuing through May 2016. It was created over a period of months from August 2009 to February 2011 with every faculty member participating. In addition, industry representatives, students and staff participated and offered suggestions for improvement and direction. It represents a consensus, in many cases a compromise, which the department collectively endorses. As time passes additional goals may be identified, others deleted, and some modified.

4. This document includes goals, objectives, strategies, and metrics of performance as defined below.
   - **Goals**: Goals consist of short-term, mid-term, long-term broad issues of importance to the department.
   - **Objectives**: Objectives are more specific than goals and are measurable.
   - **Strategy**: A plan of action including who, what, and how we will achieve our objective.
   - **Metrics**: How we determine if we meet our objectives; what are the indicators of success.

5. It is recognized that fluctuations are likely and that they are expected. Thus, most metrics of performance should be evaluated as a three-year rolling average. For purposes of establishing a baseline measurement, the period of fall 2007 through spring 2010 will be used as the three year average. One year baseline measurements will be based on the 2009-2010 academic year.

6. The goals, objectives, strategies and metrics of performance are consolidated in groups, including the Department, Undergraduate Program, Graduate Program, Research and Scholarly Activity, and Service and Extension.

Vision

The hallmark of the Texas A&M University Construction Science Department will be a culture of excellence that supports the College of Architecture and Texas A&M University mission and strategic plans.

Mission

The Construction Science Department is dedicated to education, discovery, development and application of knowledge in the field of construction while fulfilling the land grant mission of Texas A&M University and enhancing the economic development of the State of Texas. Our mission of providing the highest quality academic programs is inseparable from our mission of developing new understanding through teaching, research and service. We prepare students to assume roles in leadership, responsibility, and service to society.
The Department

Goal 1: We will be recognized as one of the preeminent construction education program in the United States and internationally as a premier construction education program. *(6 Objectives)*

Undergraduate Program

Goal 2: We will maintain a strong general, relevant, current, comprehensive, broad based undergraduate degree program, founded in construction fundamentals applicable to all sectors of the industry and responsive to the ever evolving industry and industry trends. *(5 Objectives)*

Graduate Program

Goal 3: We will review the graduate program and develop the degree options that meet the requirements of the student and the industry. *(3 Objectives)*

Research and Scholarly Activity

Goal 4: We will be engaged in discovery and research related to the built environment both in construction and related disciplines to enhance the economic development of the State of Texas and to extend the frontiers of knowledge. *(1 Objective)*

Service and Extension

Goal 5: We will maintain connections with communities, industry, professional associations, and accreditation groups through engagement in public service, public relations, internships, student chapters, and continuing education. *(1 Objective)*
The Department

Goal 1: We will be recognized as one of the preeminent construction education program in the United States and internationally as a premier construction education program.

Objective 1: Identify and establish areas of concentration as Centers of Excellence.

Strategy: The Department Head or Designee will facilitate the development of one or more concentrated areas of research and extension in construction. The departmental faculty and industry representatives will collaborate in identifying these branded areas of concentration.

1. Fall 2011 - A task force of faculty will identify those characteristics within the department’s tenured and tenure-track faculty that signify where our academic emphasis should be directed. It is essential that only one or two areas are identified to be developed into concentrations.

2. Fall 2011 - The task force will submit the concentrations to a vote of tenured and tenure-track faculty for approval.

3. Spring 2012 - The task force will produce documentation formalizing the concentration areas and the instructional controls necessary to ensure effective leadership, active participation, and quality assessment.

4. Fall 2012 - The finalized concentration areas will be presented to the Construction Industry Advisory Council for review and comment by the task force.

5. Spring 2013 - The task force will finalize each area as a Center of Excellence by producing policies and procedures that will insure long-term support and integration into departmental activities, i.e. curriculum development, faculty search, budgeting, endowments, grants and publications.

Metrics: By Fall 2013 the department will have established one or more Centers of Excellence that will have defined controls, budgets, processes, events that can be measured for success and branded as excellent in quality.

Objective 2: Inventory, document, promulgate all departmental policies, regulations, rules and procedures.

Strategy: The Associate Department Head will facilitate, with assistance of the departmental staff, the development of departmental policy and procedures manual.

1. Summer 2011 - Create an inventory of existing policies, regulations, rules and procedures.

2. Fall 2011 - Create and submit a draft manual of policies and procedures for review comment, and criticism by the stakeholders in preparation for final edit.

3. Spring 2012 - Submit a final manual to the departmental faculty for approval.

4. Fall 2012 - Publish, promulgate or post for public access the department’s policy and procedure manual.

Metrics: By Fall 2012 the department will have created and published a policy and procedure manual.

Objective 3: Ensure the long-term strength of the department through endowments that bolster the operational needs of the department, its faculty, and its students.
Strategy: The Department Head in collaboration with Dean’s office will facilitate the administration of an effective endowment program that meets the operational needs of the department, faculty, and students.

1. Fall 2011 - Create an inventory of operational and academic needs that require endowment.
2. Summer 2012 - Identify potential contributors to endowment that support the departmental mission and Centers of Excellence.
3. Fall 2012 - Publish and promulgate the operational needs of the department to the slate of potential contributors to an endowment.

Metrics: By Fall 2013 the department will have established new endowments that respond to the support and growth of the Centers of Excellence.

Objective 4: Develop and maintain an effective marketing, communications, and recruitment platform to inform students, potential students, and the public of the educational options and opportunities offered by the department using Internet and social networks.

Strategy: The Department Head or Designee and departmental staff, in collaboration with the Assistant Dean for Student Services, will facilitate and maintain an effective and accurate web-based presence for the department. This will include the investigation and potential development of a plan for the recruitment of targeted students within the freshman, change of major and transfer student admission programs and graduate students that utilizes the technologies of social networking.

1. Summer 2011 – Ensure that the department’s web presence is current and accurate.
2. Fall 2011 – Investigate the needs and requirements for social networking and the creation of a departmental presence.
3. Spring 2012 – Implement any new technologies as appropriate which assures currency and maintenance.
4. Fall 2012 – Seek new innovative methods for enhanced communications and maintenance.

Metrics: By Summer 2012 the department will have evaluated and implemented a comprehensive and innovative communications presence that has an assured maintenance program.

Objective 5: Assure and reward excellence in teaching.

Strategy: The Department Head or Designee will facilitate a program that will ensure the teaching excellence of the faculty in pedagogy and industry knowledge. This program will have as its mission the excellence of faculty in pedagogical knowledge and will ensure faculty either gains an understanding of industry or remains current in their understanding of industry.

1. Fall 2011 – The department will establish an “Excellence in Teaching” program that includes a training academy at least every two years and a faculty internship program for selected faculty.
2. Spring 2012 - Create and submit a draft program manual of policies and procedures for review comment, criticism for final edit.
3. Spring 2012 - Submit a final manual to the departmental faculty for approval.
Metrics: By Fall 2012 the department will conduct a “Excellence in Teaching” program and will have in place a system for faculty summer internships.

Objective 6: Develop and maintain a departmental Academic Quality Plan.

Strategy: The Department Head in conjunction with the Executive Committee will facilitate a program that will ensure the development and regularly updating of an Academic Quality Plan. The purpose of the plan will be to assess our performance annually in an Academic Quality Assessment Implementation Report. The main responsibility for interpretation of assessment results and recommendations for quality improvement changes lay with the Department Head and his/her designees (the undergraduate coordinator and the course group coordinators). Regular meetings of the Undergraduate Curriculum Committee are held each semester to review assessment data and an annual meeting of the Undergraduate Curriculum Committee is held to review Educational Program Objectives and Student Learning Outcomes.

1. Fall 2011 – The department will establish a comprehensive plan for quality improvement of the program and its students through development and assessment of educational program objectives as well as student learning outcomes through internal and external measures of student achievement.
2. Spring 2012 - Create and submit a draft program manual of policies and procedures for review comment, criticism for final edit.
3. Fall 2012 - Submit a final manual to the departmental faculty for approval.

Metrics: By Fall 2011 the department will have in place a departmental Academic Quality Plan that will be reviewed and updated annually. The Department Head will summarize assessment results in an annual Academic Quality Assessment Implementation Report due September 1 each year in accordance with TAMU’s Assessment Process and ACCE’s Assessment Process. The Executive Committee will implement improvements based on findings in the assessment report upon the review and advice of the Undergraduate Curriculum Committee.
Undergraduate Program

Goal 2: We will maintain a strong general, relevant, current, comprehensive, broad based undergraduate degree program, founded in construction fundamentals applicable to all sectors of the industry and responsive to the ever evolving industry and industry trends.

Objective 1: Graduate more students in fewer semesters.

Strategy: The Undergraduate Coordinator, in collaboration with Construction Science Department Head and Assistant Dean for Undergraduate Students will admit students committed to the demands of an accelerated top-tier education.

1. Each semester – New Student, Internal Transfer, and External Transfer student applications for admittance to Construction Science will be reviewed for students whose prior academic performance indicates dedication to accelerating their graduation.

2. Each semester - Lists of students who are potentials for probation or dismissal will be created and acted upon accordingly by comparing student credentials to standards established by College and Department for student Admission and Retention.

Metrics: By Fall 2012 the department will evaluate prior performance in its efforts to expedite student graduation.

Objective 2: Retain high number of students through better education, advising and mentoring.

Strategy: The Undergraduate Coordinator will prepare a performance and retention report to the Department Head. Within this report the Coordinator will propose necessary program changes that will potentially increase student retention.

1. Each semester – A comparative analysis will be conducted on current graduating senior’s responses on the Exit Survey with the prior exit survey results.

Metrics: Within thirty days of graduation, each semester the Undergraduate Coordinator will analyze, prepare, and submit a report on the retention and student exit survey data.

Objective 3: Increase non-traditional delivery methods while enhancing educational experience.

Strategy: The Department Head through the Undergraduate Coordinator and appropriate faculty coordinators, as designated will facilitate the enhancement of the educational experience through non-traditional methods.

1. Annually – Plan and offer an innovative Study Abroad program.

Metrics: Conduct at least one semester long Study Abroad per academic year.

Objective 4: Invest in and integrate strategic support of all students to enhance their focus on curricular progress.

Strategy: The Undergraduate Coordinator and COSC Advisor will facilitate the student knowledge and understanding of the requirements for successful progress to graduation. The emphasis will be to decrease average time to graduate at each degree level, to increase off-campus credits in degree plans, to increase competency-based credits earned, and to improve retention rates.

1. Each semester – Visits will be made to all lower-level COSC classes to make announcements to students regarding the availability of advising services while
encouraging students to avail themselves to this resource, to inform students of the necessity of completing prescribed courses prior to application for admittance to COSC upper-level, and the necessity of understanding and complying with pre-requisites.

2. Each semester – Visits will be made to all junior-level classes, near beginning of each semester to make announcements regarding the requirements for Internship, the need to conduct a degree audit which is required to monitor their status relative to program completion and graduation, and the necessity of following prerequisite requirements.

3. Each semester – Visits will be made to all senior-level classes near beginning of each semester, to make announcements to students regarding: 1. Necessity of understanding and following prerequisites; 2. The need to see the COSC Advisor for conduct of degree audits to monitor and understand status relative to program completion and graduation; 3. Necessity of filing for degree and preparing for graduation.

Metrics: Within first thirty days of the start of each semester a visit will be conducted in selected COSC classes that will mentor students in how to expedite their curricular progress.

Objective 5: Maintain accreditation by the American Council for Construction Education and/or other recognized agencies in the construction higher education field.

Strategy: The Department Head or Designee will facilitate the required activities necessary to remain active in the ACCE and/or other recognized agencies in the construction higher education field. The Undergraduate Coordinator will review, complete, and finalize the first draft of the accreditation documents. The Department Head will edit and submit the final documents to the ACCE.

1. As required – Timely for submittal of Final Self-study document to ACCE in accordance with schedule timeline prescribed by ACCE for each Re-accreditation visit. Effort to commence one calendar year prior to the time Self-study is due for submittal to ACCE.

2. As required - Review and analyze ACCE letter summarizing Board of Trustees reaccreditation action. Respond with Interim Reports as required by ACCE.

Metrics: There will be no weaknesses in the most current ACCE Accreditation Report. Any weakness and undeveloped potential which is cited by ACCE in its report of Board of Trustees action regarding the Reaccreditation of the Construction Science program, will be responded to timely, in accord with the Interim Reports schedule provided by ACCE.
Graduate Program

Goal 3: We will review the graduate program and develop the degree options that meet the requirements of the student and the industry.

Objective 1: Review and improve the resident research based Master of Science in Construction Management degree directed to the discovery of new knowledge and advanced study of the built environment.

Strategy: The Department Head through the Graduate Coordinator, with the advice of the Graduate Program Committee, will facilitate the review and improvement of the current MSCM thesis program.

1. Summer 2011 – Using existing syllabi and faculty interviews create a list of current topics taught within the Master’s program.
2. Fall 2011 – Using survey and innovative investigative methods create a list advanced topics sought by the construction industry at the graduate level.
3. Spring 2012 - Establish a strategy for integrating the graduate program into the departmental areas of concentration and Centers of Excellence.
4. Fall 2012 - Develop a new course listing, which will provide graduate students with a strong slate of graduate courses.

Metrics: Implement an improved MSCM program of study and research by spring 2013.

Objective 2: Develop a resident-based Masters of Construction Management (MCM) directed to the teaching of new knowledge and providing advanced study of the built environment. The MCM does not require a thesis for graduation.

Strategy: The Department Head through the Graduate Coordinator, with the advice of the Graduate Program Committee, will facilitate the development of a new non-thesis MCM program.

1. Spring 2012 - A task force of faculty will investigate the potential of offering a new Master’s of Construction Management with a non-thesis paper only option.
2. Fall 2012 - The task force will produce documentation formalizing the degree and the instructional controls necessary to ensure effective active participation and quality assessment.
3. Spring 2013 - The degree proposal will be presented to the graduate faculty for review and comment.
4. Fall 2013 - The task force will finalize the degree option by seeking College and University approval.
5. Spring 2014 - Develop new courses, as required, which will provide graduate students with a strong slate of graduate courses.

Metrics: Implement a new MCM program curriculum by spring 2014.

Objective 3: Develop a non-resident, non-research based Executive Master’s Degree in Construction Management (EMCM) tailored for those who have been working in the construction industry for at least 5 years.

Strategy: The Department Head through the Graduate Coordinator, with the advice of the Graduate Program Committee, will facilitate the development of a new practice based EMCM program. This
program will emphasize non-traditional delivery methods while ensuring an advanced educational experience.

6. **Spring 2012** - A task force of faculty will investigate the potential of offering a new Executive Master’s of Construction Management with a significant time requirement of construction management experience.

7. **Fall 2012** - The task force will produce documentation formalizing the degree and the instructional controls necessary to ensure effective active participation and quality assessment.

8. **Spring 2013** - The degree proposal will be presented to the graduate faculty for review, comment, and vote.

9. **Fall 2013** - The task force will finalize the degree option by seeking College and University approval.

10. **Spring 2014** - Develop new on-line, web-based, and summer resident courses, as required, which will provide graduate students with a strong slate of executive courses.

**Metrics:** Implement a new EMCM program of graduate study by spring 2014.

**Research and Scholarly Activity**

**Goal 4:** We will be engaged in discovery and research related to the built environment both in construction and related disciplines to enhance the economic development of the State of Texas and to extend the frontiers of knowledge.

**Objective 1:** The tenured and tenure-track faculty will elevate the impact of our scholarship in the departmental areas of concentration and the Centers of Excellence through grant proposals, peer reviewed papers, and peer reviewed conference papers and presentations. Outreach in scholarship will be enhanced by organizing home-based conferences, symposiums and workshops, authoring collaborative books and text books in the departmental areas of concentrated excellence. Scholarship and grant emphasis will be placed on faculty team collaboration.

**Strategy:** The Department Head will facilitate the administration of an effective research and scholarship assessment program that meets the operational needs of the department and faculty. This program will keep track of proposal submittals through the faculty yearly evaluation package and/or the P&T package.

1. Annually - The faculty will submit multiple funding proposals each year to the NSF, NIH or other academic research funding agencies.

2. Annually - The faculty will have multiple works in progress paper and/or submit multiple manuscripts to peer reviewed journals such as ASC’s International Journal of Construction Education and or the AIC Journal, among others.

3. Annually - The faculty will have multiple works in progress conference paper and/or submit multiple manuscripts to peer reviewed conferences such as ASC.

4. As Appropriate - The faculty will investigate the potential offerings of conferences, symposiums and workshops. A task force of interested faculty will determine the viability of the offering and lead the departmental support effort.
Metrics: By the spring of 2013, the faculty, as a team, will systematically be writing and submitting multiple research proposals in the areas of concentration. Each year the journal and paper submission will increase and be directed toward the areas of concentration in support of the Centers of Excellence. At least one major conference and/or symposium proposal will be tendered by fall 2013.

Service and Extension

Goal 5: We will maintain connections with communities, industry, professional associations, and accreditation groups through engagement in public service, public relations, internships, student chapters, and continuing education.

Objective 1: Disseminate scholarly work within the areas of construction excellence through continuing education programs.

Strategy: The Industry Relations Coordinator will facilitate the development of a continuing education program.

1. Summer 2011 – The Industry Relations Coordinator will identify local, state, national and international demand for continuing education in the areas of construction excellence.
2. Summer 2011 - The Industry Relations Coordinator will survey the CIAC membership, industry representatives, public educators and counselors as to the interest in CE classes.
3. Fall 2011 - The Industry Relations Coordinator will survey the COSC faculty to determine the current material that is available for development into a CE Class.
4. Fall 2011 – The Faculty Search Committee will initiate a faculty search for person to head the continuing education program and be academically qualified to teach in the department as well as conduct research and scholarship. Preference should be given to an academic with significant pedagogical knowledge and experience.
5. Spring 2012 – A task force of faculty will develop a slate of appropriate courses of instruction that meets with the State of Texas CEU approval, which are adaptable to the COSC faculty, that are in support of the department’s areas of concentration, and are effective and profitable.
6. Fall 2012 - The task force will finalize the continuing education program by seeking College and University approval.

Metrics: By spring 2013 the industry Relations Office will advertise and offer a full slate of CEU courses.