





# Strategic Plan Update







# **Executive Summary**

Fourteen CM initiatives were completed this last academic year AY 13-14:

- Completed on October 29, 2013, the department finished up the last of its 68 curriculum changes. This signaled the completion of several initiatives:
  - A suite of courses were developed and implemented for concentrations in industrial, commercial, heavy highway, and residential. In addition, a military concentration was included and the CM minor was modified to better facilitate the new coursework.
  - The CM curriculum was modified so that it is conducive to on-line applications and accreditation. ACCE visited in March 2014 and agreed that these changes met the existing standards;
    however, they did not review based on the new outcome based standards that should be in place by February 2015. In anticipation, the faculty developed assessment tools for student learning
    by course.
  - These course assessments were mapped to the twenty CM program's student learning outcomes. Using the new ACCE Standards, the second assessment cycle (Spring 2014), gaps in the curriculum were discovered. They have been documented in LSU's Taskstream and will be discussed at the next faculty retreat in August.
- ELAB space was defined for use and curricula. Thanks to members of construction industry, this lab has functioning models to showcase and educate students. These instruments/equipment are essential for educating the future workforce. The lab has its first course in the Fall 2014.
- In collaboration with the college and the university, a comprehensive recruiting program was completed. The Department appointed a faculty member to administer the plan. To date, a CM video has been developed, postcards have been sent to a leads list, and representatives from the Department have participated in many events on and off campus. In addition, a new brochure was developed for the Bert S. Turner Department of Construction Management. As a result, CM's freshman class enrollments numbers are very high. Since starting the CM introduction class in the Spring 2014, there have been 106 student enrolled with another 80 scheduled this fall (total of 186). Classes are full at the freshman and sophomore levels. If the majority of these students are classified as first-time full-time degree seeking freshmen, then this would set a departmental record for the number of entering freshman.
- The legislative initiative for LSU-Shreveport has begun with only 4 students in the program; however, there are 16 potential students who could start in the Fall 2014. A feasibility study was completed to determine the minimum size of the LSU-S offering. It was concluded that there needs to be at least 30 enrolled at that campus to be effective.
- An AS to BS curriculum model with Baton Rouge Community College (BRCC) was completed in January 2014. Faculty at BRCC are now modifying their curriculum to better match the model and to become ACCE accredited.
- An advisory board was developed with LSU and Alliance Safety Council for the joint OSHA Training Institute. The Board has worked to develop new safety courses as well as a CM Safety Certificate (in progress). Two courses have been taught on the LSU campus with more to come. According to OSHA, they expect at least 40 courses to be taught on LSU's campus each year.
- On March 4, 2013, the online Master of Science in Construction Management (MSCM) program started. It has been fully developed with 41 students enrolled (33 online and 8 campus). Plans are to apply for accreditation in Fall 2015. A support team has been developed with an all-important Programs Coordinator position leading the team. The Coordinator and the three graduate assistants assigned to LSU Online have backgrounds in educational design
- The Construction Management Certificate program was approved in 2013. The first course was offered on May 10, 2014. Sixteen students immediately enrolled...with no marketing or advertising.
- Similar to Professorships, the Construction Educator of Practice (CEPs) was created for Instructors and Professionals in Residence. The first entity to create a CEP (two of them) was the Construction Educator's Trust Fund with a gift of \$140,000.
- Thanks to Construction Industry Advisory Council (CIAC), all faculty/staff computers were updated. Also, funds generated from LSU Online provided the technical equipment and software for online courses.
- To increase visibility, the Department developed Facebook, Twitter, and LinkedIn pages and integrated them with HootSuite to streamline news feeds. In partnership with the CIAC and the Construction Management Advisory Council (CMAC), a joint newsletter was created to keep the stakeholders up-to-date on current events.
- The above social media sites and newsletter provided a conduit for one of CM's most important initiative to showcase student achievement. Awards, social events, networking, mentorships, career placement, etc. have been directed towards these information sources.

The lack of senior leadership has been a challenge; however, with the hire of one full professor in January and another in the Fall of 2014, the Department should be poised to do more with industry and research. For the most part, CM is successfully contributing to the college's Strategies while meeting the vast majority of its own goals. There are three areas indicating issues: student learning, laboratory teaching/research space and the small number of tenure or tenure track faculty. Student learning has been addressed by overhauling the curriculum as well as engaging the instructors in training and development; however, there are a few curriculum adjustments needed and faculty development must continue...especially since the start of LSU Online courses. As for labs, more teaching and research laboratories are being developed as the Patrick Taylor Hall renovation comes closer to reality. In an attempt to be proactive (in design and fund-raising), the Department on several occasions asked to visit with the architects of the project to align teaching needs with the identified space, but to no avail. Much is dependent on final space location, outside access, and traffic flow. CM is somewhat at a disadvantage as these lab spaces are new as opposed to the well-established labs in other departments. With established labs, decision makers can physically see the needs of the space; in contrast, new labs have no history thus requiring more development time and visualization to make good decisions. Much of our future ability to do research is crossed linked with these labs as well as our ability to provide the appropriate body of knowledge to the CM student populace. In addition, appropriate lab space will be essential to future hiring. As the Department is well above the 25:1 student/faculty college target, it would be imperative to continue hiring each year to reach this target and to stay abreast of the increases in undergraduate and graduate enrollments.

In highlight summary, CM's recruitment activities are being successful as the CM freshman classes are large and fully loaded. Retention and graduation rates are among the highest in the college. The number of students in the graduate program is at an all-time high with enrollments steadily increasing. There have been three successful hires, two of which are senior leadership positions. LSU Online continues to grow while faculty are expanding upon their teaching expertise. Issues remaining are laboratory space, number of faculty, and student learning; however, each is being addressed with the anticipation that the next assessment cycle will be seeing improvements.

# Strategy 1: Preparing LSU Engineers for a Dynamic World





## **Strategic Directive**

We live in a dynamic, rapidly changing world. We need people trained to not only proactively meet society's current demands, but also provide solutions for problems that are yet to manifest.

# **Strategic Goals**

- A. Imbue critical-thinking skills and holistic approaches to problem solving Then, cohere these skills with multi-disciplinary teamwork and communication skills.
- B. Impart life-long self-learning skills through teaching approaches that utilize fundamental concepts and technology to solve problems and learn advanced material.
- **C.** Implement a sustainable program of faculty development and training of graduate teaching assistants, which will promote the discovery and promulgation of novel and successful teaching/learning initiatives as well as the use of best teaching/learning practices.
- **D.** Encourage leadership, ethical practices, social responsibility and entrepreneurial qualities in students through mentoring, exposure through engineering professional society activities, participation in local and national competitions and other opportunities.
- E. Develop an Engineering Campus at LSU that will provide access to state of the-art instructional infrastructure support through the implementation of an Engineering Master Plan.
- F. Broaden students' global awareness through study abroad, classroom exercises and innovative experiences.

### Construction Management Departmental Goals for Strategy 1:

- **a.** Improve Student Critical Thinking Skills and Problem Solving— Courses and student activities need to be designed for the thinker with the skills to solve problems. This leads to a curriculum and activities (i.e. field trips, student competitions, etc.) that warrants constant evaluation and improvement to ensure that the students are gaining the core body of knowledge indicative of construction manager.
- b. Proactively meet the dynamic demands of the construction industry- Curricula needs to be flexible enough to allow the implementation of concentrations for the various industry types
- **c.** Improve student learning and skill sets via instructional laboratories Laboratories are germane to student learning and the development of critical thinking skills, especially for CM students. Labs are to be developed that can effectively function on multiple levels for the various concentration areas and with the OSHA Training Institute (partnership with Alliance Safety Council).

#### **CM Program Objectives:**

- 1. To deliver a comprehensive undergraduate curriculum to better meet the needs of the various industry areas: residential, commercial, industrial, highway, and military.
- 2. Establish a techno-centric student construction education that prepares students to lead in the utilization of information technology in the construction industry.
- 3. Produce professional constructors with the ability to effectively communicate, lead, team build, interact with other professionals while maintaining ethical competence.

### **Analysis**

College Of Engineering Strategic Goals: A. Imbue critical-thinking skills and holistic approaches to problem solving Then, cohere these skills with multi-disciplinary teamwork and communication skills. B. Impart lifelong self-learning skills through teaching approaches that utilize fundamental concepts and technology to solve problems and learn advanced material. C. Implement a sustainable program of faculty development and training of graduate teaching assistants, which will promote the discovery and promulgation of novel and successful teaching/learning initiatives as well as the use of best teaching/learning practices. D. Encourage leadership, ethical practices, social responsibility and entrepreneurial qualities in students through mentoring, exposure through engineering professional society activities, participation in local and national competitions and other opportunities. E. Develop an Engineering Campus at LSU that will provide access to state of - the-art instructional infrastructure support through the implementation of an Engineering Master Plan. F. Broaden students' global awareness through study abroad, classroom exercises and innovative experiences.

**Construction Management Departmental Goals for Strategy 1 a.** Improve Student Critical Thinking Skills and Problem Solving— Courses and student activities need to be designed for the thinker with the skills to solve problems. This leads to a curriculum and activities (i.e. field trips, student competitions, etc.) that warrants constant evaluation and improvement to ensure that the students are gaining the core body of knowledge indicative of construction manager. **b.** Proactively meet the dynamic demands of the construction industry— Curricula needs to be flexible enough to allow the implementation of concentrations for the various industry types **c.** Improve student learning and skill sets via instructional laboratories— Laboratories are germane to student learning and the development of critical thinking skills, especially for CM students. Labs are to be developed that can effectively function on multiple levels for the various concentration areas and with the OSHA Training Institute (partnership with Alliance Safety Council).

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The Department inserted college data for Measure 1.2 as provided by Career Services through a student perception survey. There are indications, based on this single data point, the CM program is achieving CoE Goals LSU College of Engineering Jun-14 Report

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A-F. CM Goal 1(a) seems to successful; however, Measures 1.003 and 1.004 indicate struggles in student learning. Some of this could be attributed to the failure to achieve CM Goal 1(c) as teaching laboratories have been absent for the past many years; however, with the BIM and ELab now operational, along with the massive curriculum changes, it is anticipated these numbers should get closer to the target. With all three initiatives complete, CM Goal 1(b) has been realized as it has been solidified by Measure 1.005. Overall, the CM Department is making good progress towards CoE Strategy 1; however, we need to proceed with caution as some measurements warrant adjustments and monitoring. CM Program Objectives are being acheived with 3 of 4 assessment tools indicating targets are being met.

# Strategy 1: Preparing LSU Engineers for a Dynamic World





Measures			
1.2 (A,B,C,E,J) Student ratings of degree to which LSU Engineering attributes are achieved			
1.001 (a, b, 1-3) Program Student Learning Outcome Assessment			
1.002 (a, b) Student Course Evaluations & Comments			
1.003 (a, b, 1-3) Internal Senior Exit Exam			
1.004 (a, 1-3) External AC Level 1 Exam			
1.005 (a, b, 1-3) Graduating Senior Exit Survey			
1.006 (c) Total Square feet of Laboratory Space*			
1.007 (c) Number of Labs			
1.0011 (a, b, 1-3) Program Student Learning Outcome Assessment by TaskStream			
Action Items			
Meet with Architects			
Attachments			





Develop and implement a suite of courses for concentrations in industrial, commercial, heavy highway, and residential. Target Completion Date: Fall 2013



Develop and implement a set of course assessments that are mapped to the CM program's student learning outcomes. Target Completion Date: Spring 2014.



Define usage and curricula for ELAB space and complete the space accordingly. Target Completion Date: Fall 2013

# Strategy 2: Conducting Research to Improve the Quality of Life





# **Strategic Directive**

Use-inspired research and the development of intellectual property can not only improve the quality of life for people on a global scale, but can also make an impact on our state and university. We must become more entrepreneurial to develop solutions that lead to improved quality of life and economic development. Our geographic location provides a natural environment for research. We must take advantage of the fact that "we live in the laboratory."

#### **Strategic Goals**

- **A.** Energy and Sustainable Environment—Seek low-cost, clean, traditional and alternative energy sources for transportation and power generation including alternative fuels and their efficient combustion; employ new technology to enhance production and the efficient utilization of petroleum fuels; seek out materials and technology for compact and alternative power sources; and search for efficient power transmission and distribution. All of these efforts will be pursued with a focus on maintaining a clean and sustainable environment.
- **B.** Engineered and Natural Infrastructure—Enhance coastal infrastructure to sustain environmental impacts; improve energy and industrial infrastructure; and develop coastal habitat and environmental infrastructure. Additional focus should center on the sustainability and interplay of the natural and built environment along with state-of-the-art monitoring systems.
- C. Utilize and enhance expertise in Materials and Nano-Micro-Wafer Scale Systems to provide an integral, inter-disciplinary research and infrastructure support for the two thrust areas.
- D. Leverage high-performance computing resources for research in various fields and for extending technology in high-performance computing.
- **E.** Enhance the effectiveness of the Engineering Campus through remodeling and distribution of research space in a flexible manner.
- **F.** Develop research infrastructure and create an ecosystem that not only attracts and retains top-notch research faculty and graduate students, but also facilitates the establishment of national engineering research centers.

#### Construction Management Goals for Strategy 2:

- **a.** Enhance research faculty development-The CM department will invest in faculty development to increase the faculty performance with respect to research activity. That includes both research funds as well as journal publications produced by graduate faculty. The department also aims to increase faculty retention rate through by assisting junior faculty develop.
- **b.** Develop CM Research labs—The CM department needs to build labs to support research activities in multiple important areas including, industrial material performance and characterization, indoor and outdoor air quality, sustainable construction and hazard resistant construction. This will allow the LSU CM department to compete in new and emerging vital areas of research including nano technology in construction.
- c. Improve quality of life and economic development through collaborative research activities with industry- The CM department in conjunction with the CIAC will start a CM research partnership that will grow to become an industry funded research center that strives to solve the construction industry challenges.

#### **Analysis**

**CoE Goals: A.** Energy and Sustainable Environment—Seek low-cost, clean, traditional and alternative energy sources for transportation and power generation including alternative fuels and their efficient combustion; employ new technology to enhance production and the efficient utilization of petroleum fuels; seek out materials and technology for compact and alternative power sources; and search for efficient power transmission and distribution. All of these efforts will be pursued with a focus on maintaining a clean and sustainable environment. **B.** Engineered and Natural Infrastructure—Enhance coastal infrastructure to sustain environmental impacts; improve energy and industrial infrastructure; and develop coastal habitat and environmental infrastructure. Additional focus should center on the sustainability and interplay of the natural and built environment along with state-of-the-art monitoring systems. **C.** Utilize and enhance expertise in Materials and Nano-Micro-Wafer Scale Systems to provide an integral, inter-disciplinary research and infrastructure support for the two thrust areas. **D.** Leverage high-performance computing resources for research in various fields and for extending technology in high-performance computing. **E.** Enhance the effectiveness of the Engineering Campus through remodeling and distribution of research space in a flexible manner. **F.** Develop research infrastructure and create an ecosystem that not only attracts and retains top-notch research faculty and graduate students, but also facilitates the establishment of national engineering research centers

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CoE Goals A-B are aligned with CM. In this area, our small group of researchers are progressing well with limited resources. They are submitting larger proposals, two of which were funded at close to \$1M. As the college targets for this strategy are the same for all departments the CM department is excelling in areas of which can be can be affected by faculty and staff within the department. Factors out of our direct control, Goals D and E, have become detrimental to total number of research faculty, research funding, new research funding, and percentage of proposals funded. However, as for Goal F, we seemed to have developed an CM

research core that is attracting top-notch researchers. This is reflected with the hiring of two internationally known professors within our discipline. It will be interesting to see the outcome of these hires this next assessment cycle. The department, for the most part is meeting CM Goal 1(a) as the faculty continue to excel in publications, PhDs, and MSCM students. At this point, the Department has reached critical mass as each research faculty has reached their limit in the number of student they can fund and supervise. We now have 56 graduate students (13 of which are PhDs) with a 2.5 FTE research equivalent. CM Goal 1(b) is still negative as we have yet to establish any research lab due to space limitations. We are hopeful that the renovation of Patrick Taylor Hall will allow us usable space from which to set up research labs. CM Goal 1(c) has not been met as the initiative related to these metrics have yet to begin.

Overall, caution and close monitoring is needed as lab space and faculty lines are allocated to the various departments with the college.

# Strategy 2: Conducting Research to Improve the Quality of Life





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Measures			
ii	2.3 (A) Total new research fundingCM		
III.	2.4 New research funding per FTE		
	2.5 New proposals submitted per FTE		
	2.6 New proposals funded per FTE		
<b>l</b> 1	2.7 Percentage of proposals funded (based upon project credit) over \$500K		
	2.9(E) Research expenditures per square foot of research space		
III.	2.001 (a) Total number of research faculty		
<u>li</u> 1	2.002 (a) Number of Conferences /workshops attended each year (x per research faculty)		
<b>l</b> 1	2.003 (a) Number of journal publications per year		
1	2.004 (a) Number of Ph.D. graduates supervised each year		
1	2.005 (a) Number of MSCM graduate students supervised each year		
II. 4	2.006 (a) Cumulative number of new tenure track faculty* • Based on 4 students graduating each year per faculty		
<u>li.</u> 1	2.007 (b) Funds acquired for CM lab space		
II. 4	2.008 (b) SF Area of CM research lab space		
i -	2.0011 (c) Number of industry research partners		
i -	2.0012 (c) Number of proposals submitted annually with industry		
i -	2.0013 (c) Funded research with industry		
i -	2.0014 (c) Total number of industry companies participating		
i -	2.0015 (c) Number of manuscripts published with industry each year		
Actio	n Items		
Atta	hments		

# **Initiatives**



— Complete one research lab. Target completion date: Fall 2016.



Develop a small model for industry funded research similar to CII. Target completion date: Fall 2015







# **Strategic Directive**

Fostering a culture of diversity adds more points of view, yields a more diverse workforce and ultimately increases the overall strength of our College.

# **Strategic Goals**

- A. Proactively engage with academic partners both in Louisiana and elsewhere to establish an active recruiting pipeline of high-quality, diverse students.
- B. Establish a good rapport with feeder schools to attract diverse undergraduate and graduate students.
- **C.** Increase diversity in recruitment and retention at all levels.
- **D.** Enhance the learning experience by exposure to other cultures through increased global diversity.

## **Construction Management Goals for Strategy 3:**

- **a.** Promote the construction management identity into the populous Proactively engage with middle/high schools community colleges, and the general public so they can be introduced to the CM and potentially choose it as a career path.
- b. Foster an inclusive CM experience so as to to create opportunity for potiential t LSU students to have a more in-depth experience with the types of career paths available to them through CM.

## **Analysis**

**COE Goals: A.** Proactively engage with academic partners both in Louisiana and elsewhere to establish an active recruiting pipeline of high-quality, diverse students. **B.** Establish a good rapport with feeder schools to attract diverse undergraduate and graduate students. **C.** Increase diversity in recruitment and retention at all levels. **D.** Enhance the learning experience by exposure to other cultures through increased global diversity.

**CM Goals: a.** Promote the construction management identity into the populous – Proactively engage with middle/high schools community colleges, and the general public so they can be introduced to the CM and potentially choose it as a career path. **b.** Foster an inclusive CM experience so as to to create opportunity for potiential t LSU students to have a more in-depth experience with the types of career paths available to them through CM.

The CM Department and its program are fairing well in the area of diversity as almost 50% of the faculty are women and the various programs are meeting targets; however, the undergraduate program saw a drop in female population. This is due to the increase in enrollments as a percentage. College and department goals are being met. Much of this is due to a concerted recruiting campaign by faculty and staff.



# **Strategy 3: Innovate through Diversity**





Ме	asur	res
l.	1	3.1 Percent of underrepresented minority undergraduate students
li.	#	3.2 Percent of female undergraduate students
	1	3.3 Percent of underrepresented minority graduate students
		3.4 Percent of female graduate students
li.	1	3.5 Percent of US Citizen graduate students
Ac	tion	Items





Develop AS to BS online curriculum model with BRCC



# Strategy 4: Improving and Diversifying Louisiana's Economy





# **Strategic Directive**

Creating a vibrant, innovative, research-based College filled with a talent-rich pool of LSU Engineers is key to generating creative ideas and becoming an attractive partner to companies across the globe. Innovation through academia and the business world will spawn a rich environment for companies and businesses to grow locally, paving the way for further diversification of our state's economy.

### **Strategic Goals**

- A. Establish an atmosphere for entrepreneurial activities that result in start-up enterprises with a focus in emerging technologies.
- **B.** Partner with the Louisiana's economic development team and others to diversify the state's economic base. Diversification will be accomplished by promoting an ecosystem for innovation and technology transfer that will develop and foster university/industry partnerships in targeted areas for job creation.
- C. Support, reconginze and encourage faculty members' outreach for increasing College collaboration with industry and related College stakeholders.
- **D.** Foster "for profit" relationships between the college and corporate partners.
- E. Promote cooperative partnerships with our industry stakeholders that assists the needs of our students and faculty along with the partnering entity.

### Construction Management Goals for Strategy 4:

- **a.** Increase industry awareness of education, research, and outreach activities— As the CM department expands its collaborative efforts, it is important for these activities to be promoted and advertised. Awareness should result from forums with industry, collaborative education/research/service programs.
- **b.** Foster industry participation co-op/internships Increasing student participation in co-op and internships will indirectly improve Louisiana's economy. The practical work experience that students obtain through these opportunities coupled with their CM classwork will better equip students in their future careers.
- c. Promote construction safety through collaboration For a construction manager, construction safety is essential for company's growth or to becoming an attractive business partner. Providing opportunities for industry to easily collaborate with the department will create partnerships that benefit both entities and potentially offer opportunities for startup companies. The exchange of knowledge will improve and increase Louisiana's economy and help local business grow

# **Analysis**

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The department has yet to meet the college's Goals A, B, and D as the linked departmental initiative has just begun. In addition, A full professor was hired recently specifically to help us meet these goals. It is anticipated that these metrics will be meet within the next assessment cycle. CoE Goals C and E, along with CM Goals (a-c) are being met as involvement with industry has increased with CIAC/CMAC annual membership, funding from industry, and OSHA training.

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# Strategy 4: Improving and Diversifying Louisiana's Economy





Ме	Measures		
	4.6 Number of corporate interactions with departments/research centers		
i.	4.8 Total Industrial Research funding		
li <sub>s</sub>	4.9 New industrial research funding per research FTE		
li <sub>s</sub>	↑ 4.001 (a) Funding from Construction Industry Advisory Board		
li.	4.002 (a) Funding from the CM Alumni Association		
li <sub>s</sub>	↑ 4.004 (a) CIAC annual membership		
li <sub>s</sub>	4.005 (a) CM Alumni annual membership (cumulative)		
	4.006 (b) Number of companies participating in co-op/internships		
l.	4.007 (b) Number of students participating in co-op/internships		
l.	♠ 4.008 (c) Number of collaborative construction safety related activities with industry		
li.	4.009 (c) Number of OSHA courses delivered		
Act	tion Items		
Att	cachments		

Init	Initiatives			
9	<b>/</b>	Develop advisory board with LSU and Alliance Safety Council for the joint OSHA Training Institute		
9	1	Integrate OSHA courses into CM curriculum		
6	_	Intergrate CM Esculty with Injectry partners with various activities		



# **Strategy 5: Enhance Recruitment and Retention**





## **Strategic Directive**

For a student, engineering is a challenging area of study. It is important to build a welcoming community of immersion that will offer support and help budding engineers form close-knit bonds with other students to ease their transition through the early freshman/sophomore years.

### **Strategic Goals**

- A. Design all student-oriented services and communications to efficiently utilize students' time through proactive and sensitive actions by faculty and staff, to create a welcoming and inclusive learning environment.
- B. Offer enhanced Residential College and off-class experiences to develop a sense of community through periodically organized activities by student professional societies and other groups.
- C. Enhance student advising and mentoring experience, and the quality of on- and off-class contact time with faculty members.
- **D.** Provide convenient, flexible and safe places for students to gather and study.
- E. Create and implement best practices in engineering education that recognize the changing background of students and also the rapidly changing technologies.

#### Construction Management Goals for Strategy 5:

a. Foster a sense of community within the CM student body. Increasing student participation in various academic and industry functions allows student to network with their peers and potential employers.

# **Analysis**

**CoE Goals: A.** Design all student-oriented services and communications to efficiently utilize students' time through proactive and sensitive actions by faculty and staff, to create a welcoming and inclusive learning environment. **B.** Offer enhanced Residential College and off-class experiences to develop a sense of community through periodically organized activities by student professional societies and other groups. **C.** Enhance student advising and mentoring experience, and the quality of on- and off-class contact time with faculty members. **D.** Provide convenient, flexible and safe places for students to gather and study. **E.** Create and implement best practices in engineering education that recognize the changing background of students and also the rapidly changing technologies.

CM Goal 1a. Foster a sense of community within the CM student body. Increasing student participation in various academic and industry functions allows student to network with their peers and potential employers.

The CM Department exceeds college averages for retention and graduation rates as the number come available; however, the total number of graduates still needs to be monitored. The most serious issue is the student to FTE faculty ratio at 35:1 when it should be at 25:1. Upcoming hires should help offset, but not alleviate, this problem. Also, our total enrollment is below target but is steadily climbing each semester as recruiting efforts become effective and as the industry need increases. Using these metrics, we are improving on the the college's Goals A-E but not there yet. For the CM Department retention is a function of community. Industry, student, and faculty parnter activities are critical to the CM student population. Concerted efforts to improve the sense of community came through the three initiatives...all of which have been completed. Increases in almost all of CM's measures indicate an improve over last year's numbers. Probably the most noteworthy is the number of companies at the Construction Interview Day (CID)...101 companies during the FY 2013-2014 year. This is 18 shy of a record year. Without a doubt, the Department is meeting its goals. Overall, we are being successful in our role to meet Strategy 5 - Enhance Recruitment and Retention.

# Trategy 5: Enhance Recruitment and Retention





Me	Measures		
	1	5.1 Retention Rate for the Department(1-2 curricula years)	
li.	1	5.2 Retention Rate for the Department (3-4 curricula years)	
		5.3 Graduation Rate in the Department - 6 year	
		5.10 Total number of graduates annually	
	#	5.11 Total number of Masters degrees per TTT TTF awarded annually	
		5.14 (A,C,D,E,F,G) Total number of undergraduates/faculty	
		5.13 (A,C,D,E,F,G) Total number of enrollment	
		5.001 (a) Number of first time full time freshman	
	1	5.002 (a) Number of counselors contacted annually	
	1	5.004 (a) Average number of students in CSA during the year	
	1	5.005 (a) Number of mentorship relationships produced each year	
		5.006 (a) Number of field trip participants each year	
	_	5.007 (a) Number of Sigma Lambda Chi members	
	1	5.008 (a) Number of interviews at Construction Interview Day (CID)	
	1	5.009 (a) Number of companies attending Construction Interview Day (CID)	
		5.0010 (a) Number of students enrolled in the elective internship course	
li.	1	5.0011 (a) Average GPA for graduating seniors	
li.	1	5.0012 (a) Average annual salary of graduates	
	1	5.0013 (a) Graduate job placement rate	
Act	ion	Items	
Att	ach	ments	
Att			

Initiatives			
9	Develop a comprehensive recruiting program		
9	Complete the legislative initiative with LSU-S via online coursework.		
0	Showcase student acheivement.		









## **Strategic Directive**

Louisiana is a state steeped in engineering and construction management. The flagship university produces talented, highly recruited engineering graduates who thrive in the workforce. Global companies look at us to meet many of their employee needs. It efforts equal the quality of our students and convey these facts to our stakeholders in order to grow and fulfill our mission.

#### **Strategic Goals**

- **A.** Focus communication to College stakeholders regarding opportunities offered by the College and its units. Stakeholders include students, alumni, friends, industries, appropriate government offices, academic partners and colleagues.
- **B.** Enhance, standardize and upgrade department and College communications (print, web, face-to-face, etc.) to effectively project the College's brand and image, and disseminate its activities, achievements, and opportunities.
- C. Exploit faculty/staff accomplishments that recognize professional activities, innovative research, as well as in the election to membership in national committees and academies.

# **Construction Management Goals for Strategy 6:**

**a.** Do a better job marketing (branding) LSU CM to the population. Opportunities to focus communications back to the department are unlimited due to social networking. Conveying student and faculty achievement, hosting international events, branding the CM image on various activities, and communicating with stakeholders help CM graduates thrive in the workforce as well as meeting industry needs. *Target Completion Date*: Fall 2017

# **Analysis**

**CoE Goals: A.** Focus communication to College stakeholders regarding opportunities offered by the College and its units. Stakeholders include students, alumni, friends, industries, appropriate government offices, academic partners and colleagues. **B.** Enhance, standardize and upgrade department and College communications (print, web, face-to-face, etc.) to effectively project the College's brand and image, and disseminate its activities, achievements, and opportunities. **C.** Exploit faculty/staff accomplishments that recognize professional activities, innovative research, as well as in the election to membership in national committees and academies.

**CM Goals: a.** Do a better job marketing (branding) LSU CM to the population. Opportunities to focus communications back to the department are unlimited due to social networking. Conveying student and faculty achievement, hosting international events, branding the CM image on various activities, and communicating with stakeholders help CM graduates thrive in the workforce as well as meeting industry needs.

The LSU department of Construction Management has made strides in promoting itself through social media, conferences, and student competitions. We have a newly redesigned website which is linked to many different social media outlets. All with the general goal of dispersing information about the department and promoting our overall 'brand'. Through multiple organizational email blasts and social media pages we are able to express the accomplishments of our faculty, staff, and students. It appears that a bit more diligence is needed is locating and promoting the accomplishments of individuals within our group. Opportunities such as conferences give our faculty the ability to shine, while student competitions allow the CM students the chance to showcase the effectiveness of the overall curriculum.

# **1**

# Strategy 6: Improving the College's Visibility





Measures		
l <sub>l</sub>	1	6.001 (a) Number of Facebook "likes"
li.	1	6.002 (a) Number of sessions on the CM webpage
	1	6.003 (a) Number of contacts through LinkedIn
	#	6.004 (a) Number of student recognized for their achievements
	#	6.005 (a) Number of faculty recognized for their achievements
li.	1	6.007 (a) Number of Conferences attended by faculty - data can also be found in measure 2.002
	1	6.008 (a) Number of Student Competition Teams
		6.009 (a) Number of faculty presentations/posters
	1	6.0010 (a) Number of professional or academic leadership positions held by faculty
Act	ion	Items
Att	ach	ments





# **Strategy 7: Diverse Streams of Support**





# **Strategic Directive**

Our College possesses the talent, skills and leadership to undertake unique opportunities that are often presented. We must diversify funding sources for establishing a pool of working capital so that we can be flexible and nimble enough to respond to the many opportunities that arise.

#### **Strategic Goals**

**A.**This strategy measures our philanthropic and stewardship progress.

# **Construction Management Goals for Strategy 7:**

- **a.** Diversify traditional instruction to include online deliveries. The market is ready for quality online instruction. Technology and social websites have brought teaching to new heights. Along with this comes opportunities to establish working capital that can fund the program when needs arise.
- **b.** Enhance a philanthropic efforts to stabilize instructor employment. National trends for engineering colleges indicate the increase of tenure and tenure track faculty to fulfill research needs; however, in most cases, this begins to decrease or eliminate the full time teaching positions. CM programs depend on instructors with industry experience to deliver core construction content to its students. The construction industry is uniquely positioned to assist the Department in diversifying its funding sources

### **Analysis**

**CoE Goals: A.** This strategy measures our philanthropic and stewardship progress.

**CM Goals: a.** Diversify traditional instruction to include online deliveries. The market is ready for quality online instruction. Technology and social websites have brought teaching to new heights. Along with this comes opportunities to establish working capital that can fund the program when needs arise. **b.** Enhance a philanthropic efforts to stabilize instructor employment. National trends for engineering colleges indicate the increase of tenure and tenure track faculty to fulfill research needs; however, in most cases, this begins to decrease or eliminate the full time teaching positions. CM programs depend on instructors with industry experience to deliver core construction content to its students. The construction industry is uniquely positioned to assist the Department in diversifying its funding sources

No college data supplied; however, the Patrick Taylor Building Campaign resulted with about 25% of the funds coming from the construction industry. Funding diversity provided by the Department has increased due to the creation of two Online facilitators, the Post Baccalaureate Certificate and the MSCM Online, and the implementation of the OTI OSHA courses in association with Alliance Safety Council. These teaching opportunities enhance the department's earning capital while promoting the LSU 'brand'. Other funding opportunities include donations, such as the one received yearly from the Construction Industry Advisory Council. These areas of revenue greatly enhance the departments flexibility when opportunities or needs do arise. Overall, the department appears to to be moving in an positive direction regarding various and diverse forms of support.



# **Strategy 7: Diverse Streams of Support**





Me	asur	res
	_	7.1 # Visits to Core Portfolio of Donors
li <sub>a</sub>	_	7.2 Number of Total Philanthropic Proposals Submitted
li <sub>a</sub>	_	7.3 Number Philanthropic Proposals Funded
li <sub>s</sub>	_	7.4 Number of Total Visits by Development
li <sub>s</sub>		7.5 Philanthropic Funds Raised-CM
li <sub>s</sub>	_	7.6 Alumni/donor special annual events or activities
li <sub>a</sub>	1	7.001 (a) Commutative total number of online courses developed
li <sub>a</sub>		7.003 (a) Commutative total number Certificates developed
li <sub>a</sub>	1	7.004 (a) Number of students enrolled in online courses
li <sub>s</sub>	1	7.005 (a) Number of online courses taught
li <sub>a</sub>	1	7.006 (a) Number of online certificates awarded
li <sub>a</sub>	1	7.007 (a) Number of online MSCM degrees awarded
li <sub>a</sub>	#	7.008 (b) Number instructors and/or PIR lines funded
li <sub>s</sub>		7.009 (b) Number of Industry visits by department
Act	tion	litems
Att	ach	ments

Ini	Initiatives			
9	Modify and streamline the CM curriculum so it is conducive to on-line applications and accreditation.			
9	Develop and Implement an online Master of Science in Construction Management (MSCM) program .			
0	Develop and implement a Construction Management Certificate program.			
0	Develop an industry funded instructor position - Construction Educator of Practice (CEPs):			



# **Strategy 8: Effective Decision Making**





# **Strategic Directive**

Leading engineering institutions thrive in creating special environments that foster this strategy. In doing so, we will efficiently and expeditiously achieve our long-term goals.

# Strategic Goals

- A. Provide an effective decision making environment that enhances operational effectiveness.
- B. Institute flexible and agile organizational models to respond to changing educational, research and outreach opportunities.
- **C.** Promote faculty and staff to continually improve the quality of service provided.

# **Construction Management Goals for Strategy 8:**

a. Improve departmental communications. Generate awareness of relevant department activities and personnel needs while establishing hierarchal stability.

# **Analysis**

**CoE Goals: A.** Provide an effective decision making environment that enhances operational effectiveness. **B.** Institute flexible and agile organizational models to respond to changing educational, research and outreach opportunities. **C.** Promote faculty and staff to continually improve the quality of service provided.

CM Goals: a. Improve departmental communications. Generate awareness of relevant department activities and personnel needs while establishing hierarchal stability.

CoE Goals A-C are aligned with CM. Within our department, communication is key. Many areas of involvement are evolving so quickly that weekly and monthly meetings were established in order to facilitate better understanding and operations. Currently all personnel have complete access to basic forms and information, even in real time as these documents evolve.

# 1

# **Strategy 8: Effective Decision Making**





Me	asures
la.	8.2 Percent of Staff - Increased Knowledge, Skills and Abilities (2+ trainings)
la.	♦ 8.001 (a) Number of Meetings
li.	↑ 8.002 (a) Average percentage of faculty attending meetings
li.	↑ 8.003 (a) Number of faculty/staff with access to CM share folder
ll.	↑ 8.004 (a) Cummlative number of documents in share folder
Act	tion Items
Att	tachments





Create documentation outlining department procedures and defining levels of authority required for decision making. Target completion date



Develop an online document storage system for faculty access to all committee minutes and other relevant data. Target completion date



Update faculty/staff computers