

*"Advancing The Concrete
Industry By Degrees."*

2010-2011
ANNUAL REPORT

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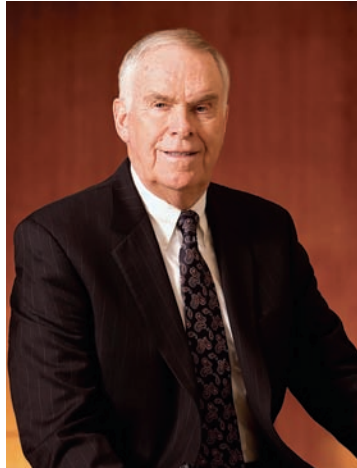
INTRODUCTION FROM THE EXECUTIVE DIRECTOR

THE CONCRETE INDUSTRY MANAGEMENT PROGRAM (CIM)

continues to flourish under the direction of the National Steering Committee (NSC). Today there are five distinguished universities with active programs that offer degrees in CIM. Enrollment in the program continues to grow and today nearly 600 students are pursuing degrees in CIM. Equally impressive is the fact that there are a like number of graduates with an industry retention rate of over 80 percent.

The success the program enjoys is a testament to the strong support of the concrete industry. This is best demonstrated by the sponsoring organizations of the NSC. From the birth of CIM in 1995, the National Ready Mixed Concrete Association (NRMCA), the Portland Cement Association (PCA) and the RMC Research and Education Foundation provided a significant amount of financial support to MTSU. In 2003, additional associations and foundations within the concrete industry pledged their support and formally joined the NSC. The NSC has added the American Concrete Institute Foundation, American Society of Concrete Contractors, the American Concrete Pipe Association, National Concrete Masonry Association, National Precast Association, and the Precast/Prestress Concrete Institute as members of the steering committee. This strong industry coalition continues to grow, and recently, the International Concrete Repair Institute became a member of NSC.

Every one of our sponsoring organizations is represented on the NSC Board of Directors. The board is further enhanced by executives of some of the concrete industry's leading producing and contracting companies. The board provides oversight to the operations of NSC as it pursues its mission of providing financial support, oversight and direction to the CIM program schools. The direction established by the board is carried out through the work of the various NSC committees.



Highlights for this past year for CIM include:

- Distributed \$435,000 in financial support to program schools.
- In collaboration with Hanley Wood, Ritchie Brothers Auctioneers and the World of Concrete, CIM held the sixth annual auction which raised gross revenues of \$507,000.
- The Education Committee developed a process for accreditation of program schools.
- The Masters Task Force continued development of the Executive MBA which will be launched in the fall of 2012.
- The Path Forward and Long Range Planning Committees finalized the plan for future program funding now that the initial five-year commitment for expansion is complete.
- The Marketing Committee produced a record number of promotional pieces, news releases, the second award-winning annual report, auction advertising, the electronic newsletter, and the CIM website, www.concretedegree.com.

The NSC recognizes the unique partnership that is the basis for our overall success. Every program university receives financial support equal to or exceeding the amount from NSC from their local industry patrons. Patrons provide real-time support in many areas for the programs including scholarships, faculty development, guest lecturing and facilities enhancements. The vision of the partnership is for the NSC to focus on the overall development and advancement of CIM at a national level and the patrons to focus their efforts on the individual programs.

As you review this report, pay close attention to the accomplishments of the individual programs. The concrete industry should be very proud of all that has been achieved in a relatively short time. What is truly exciting is the impact that the CIM graduates are beginning to have on the industry; it is easy to envision what they will contribute in the future.

SINCERELY,

Eugene P. Martineau
Executive Director,
CIM National Steering Committee

MESSAGE FROM THE CHAIRMAN



IT HAS BEEN ANOTHER CHALLENGING YEAR

for our industry, but despite the economic climate, it was another successful year for the CIM program. The 2010-2011 CIM Annual Report provides industry supporters with an update of the past year's activities and accomplishments. The report shows the current status of the CIM programs including Arizona State University, California State University – Chico, Middle Tennessee State University, New Jersey Institute of Technology, and Texas State University – San Marcos. Each institution report includes enrollment information, faculty updates/research, student activities/service projects, patrons' group updates and program financial information.

The report also provides updates from each of the CIM committees. The efforts and work product of these committees allow the CIM program to remain unique within the industry. CIM students are able to complement their classroom education with field trips and attendance at industry events. Students have competed in the ACI student competitions and have done very well. The students are very appreciative of the opportunities that have been provided to them.

The Education Committee had a busy year under the leadership of Rex Cottle. It has finalized accreditation criteria by which all five programs will be evaluated. The Path Forward Task Group has also worked on guidelines, which will determine the future funding levels from the National Steering Committee (NSC). Middle Tennessee State University (MTSU) is the first program to be accredited having been successfully evaluated by the accreditation team in the spring. The Marketing Committee, under the leadership of Brian Gallagher, continues to inform the industry about the CIM program. Through the website and social media, the industry is able to stay abreast of the latest CIM events. The Long Range Planning Committee continues to provide the vision and direction under the leadership of Alan Nedza. The World of Concrete and Ritchie Brothers continued their support of the annual CIM Auction. Peter Brewin served as chairman of the



Auction Committee and the industry once again rallied to support the event, which raised more than \$500,000 in proceeds. This event has become the major source of income for the CIM NSC and allows us to continue supporting the CIM programs.

A CIM press conference was held at CONEXPO-CON/AGG which announced the CIM Executive MBA Program, which will begin in September 2012. This program is currently being finalized by industry representatives, the CIM and business faculty at MTSU and representatives from the

other CIM schools. One of the prerequisites of the program is that all participants must have been out of school for at least five years. This promises to be one more way for us to provide a steady stream of qualified future leaders for the concrete industry.

I would also like to thank all of the local patron groups which have been the backbone of each of the CIM programs. These groups continue to provide guest lecturers, sponsor field trips, hire students and graduates and provide financial support that matches or exceeds that of the NSC.

We need your continued support in these trying economic times. We must continue to provide jobs to students looking for internships and full-time jobs for graduates. Working together, we can provide the leaders that this industry will require in the future.

Thank you your continued commitment to the CIM program. Please review this annual report and feel free to share it with others. Any suggestions and comments are welcome.

SINCERELY,

Mike Schneider

Mike Schneider
Chairman, CIM National
Steering Committee



DR. REX COTTLE
Chairman
Education Committee

THE EDUCATION COMMITTEE is comprised of industry and academic members who are committed to enhancing our CIM programs and to ensuring the graduates are well prepared to make significant contributions to the concrete industry. The Committee is proud of the evolution of our CIM programs and excited about their future potential. During the past year, the Education Committee addressed several important issues that will enhance the programs going forward.

We are very excited about the kickoff in 2012 of the Executive MBA in Concrete Industry Management at Middle Tennessee State University. This innovative program will provide emerging industry leaders with a graduate business degree that focuses on business aspects of the concrete industry. Business faculty members are interning with concrete-related companies to prepare relevant course material. Applications are being accepted for the first cohort.

We developed an accrediting process for CIM programs that is based on criteria intended to foster the systematic pursuit of quality improvement in CIM education, to assure curricular consistency and rigor among CIM programs, and to meet the needs of the concrete industry. The National Steering Committee (NSC) began implementing the accreditation process by reviewing the flagship CIM program at MTSU. As a result of initiating the accrediting process, the Education Committee has recommended that each CIM program develop a continuous five-year strategic plan, annually report to the NSC on the progress made towards achieving their objectives, and modify the plan in response to the changing challenges and opportunities anticipated in the future.

We made a recommendation to the NSC on future funding of the CIM programs that included criteria to use in assessing the current programs, start-up funds to support new programs if they

are warranted, baseline funding for those programs that have been accredited, and a performance evaluation for programs that are meeting expectations toward their five-year plan.

The Education Committee worked with Hanley Wood to establish the Concrete Industry Management Journal. This journal will be a peer-reviewed publication of research articles that will increase the knowledge of the concrete industry and provide academic and industry researchers a scholarly publication focused on issues relevant to the concrete industry. The first journal should be published in 2012.

The CIM programs collaborate on numerous academic and industry initiatives. This summer, the faculty and program directors have been developing a grant proposal for submission to the National Science Foundation that builds upon the previous NSF grant. This is just one exciting example of the ongoing synergy and cooperation shared by our CIM programs.

Despite the slow economic recovery from the recession, our CIM programs have continued to provide a contemporary education to students seeking careers in the concrete industry. The economy is facing uncertainty, but our CIM programs have met the challenges and have become more established in their respective academic institutions. We greatly appreciate the directors, faculty and staff for their tireless dedication to our CIM students.



MARKETING COMMITTEE REPORT



BRIAN GALLAGHER

Chairman
Marketing Committee

THE CIM MARKETING COMMITTEE is focused on raising overall awareness of the CIM Program, including the NSC and each CIM program. During the last year, our efforts included a significant emphasis on promoting the new Executive MBA program and the annual auction.

We've engaged in a variety of integrated marketing communication efforts that include a number of promotional, marketing and public relations activities to build overall awareness of CIM. The Marketing Committee also provides marketing support for CIM institutions including the sharing of best practices, leveraging marketing efforts, and maintaining CIM brand and message consistency.

Our efforts are designed to reach a variety of targets, including: the construction industry, the concrete industry, the general media, the academic community and potential students and student influencers.

Our integrated marketing communications program includes:

- **Advertising:** To help promote the CIM program to the concrete and construction industry, we have developed a series of print and web ads that have run free-of-charge in association and industry publications. Several concrete industry associations, publications, and websites have generously donated print and on-line ad space to promote CIM and the CIM Auction.
- **Auction Support:** The Marketing Committee remains an instrumental part of the annual CIM auction. We manage a number of activities to help promote the auction including: press releases, promotional collateral, advertisements, web marketing and other efforts.
- **Collateral & Promotional Materials:** The Committee produced various promotional materials to support the CIM image and/or brand, including brochures, graphics and other materials. In addition, the Marketing Committee produces the Annual Report, developed to inform, educate and update stakeholders on national and institutional activities. In addition, the Annual Report

serves as an important marketing tool for CIM. In May 2011, among thousands of entries from throughout the United States and several other countries, the CIM 2009-2010 Annual Report was selected to receive a Gold-level Hermes Creative Award. The Hermes Creative Awards is an international competition for creative professionals involved in the concept, writing and design of traditional and emerging media.

- **Events & Trade Shows:** In 2010 and 2011, CIM exhibited at the World of Concrete, CONEXPO-CON/AGG, Concrete Works, NRMCA's annual meeting, ACI's convention, ICRI's annual meeting, and several other national and local events.
- **Public Relations:** Our public relations efforts are focused on two areas: promoting the CIM programs to the industry and promoting CIM programs to students and influencers (parents, guidance counselors, etc.). We also have helped promote the CIM Executive MBA Program with a series of press releases. The Marketing Committee has been publishing the CIM eNews eight times per year, reaching more than 2,000 people with each edition. We also held press conferences at the 2011 World of Concrete and the 2011 CONEXPO-CON/AGG Show. For the last four years, CIM has been working with Constructive Communication, Inc. (CCI) on a proactive public relations campaign that has resulted in the distribution of over 8 press releases and placement of over 41 articles in industry publications such as Concrete Construction, Concrete Producer, Concrete Technology Today and Concrete Repair Bulletin, Better Roads, and Concrete International. Articles also had online coverage on websites such as Concrete Producer Online, ForConstructionPros.com, Concrete Construction Online, Construction Equipment Guide.com, and Aggregate Research.com.
- **Website and Social Media:** The Marketing Committee continues to enhance the CIM web presence by adding interesting and relevant content, news and tools. We continued our search engine optimization (SEO) initiatives, and social media efforts. These include using RSS, Twitter, LinkedIn, Wikipedia, Facebook, and the CIM Blog.



AUCTION AND RESEARCH COMMITTEE REPORTS



EUGENE MARTINEAU

Chairman
Auction Committee

OVER THE PAST FIVE YEARS the annual CIM auction held at The World of Concrete (WOC) has played an increasing role in the National Steering Committee's funding of the CIM program. The 2011 auction faced a number of challenges starting with the depressed level of the construction economy and its negative effect on the concrete industry. In spite of these challenges and due to the efforts of a highly effective auction committee under the leadership of committee chairman Peter Brewin of GCC, we are pleased to report the auction was an overwhelming success. We had a record-setting 150 companies who supported both the live and silent auctions by donating products, services, tickets to sporting events, electronics, vacation packages, and cash. Headlining the donated items was a Mack Truck model GU713 equipped with a McNeilus 11-cubic-yard Bridgemaster® concrete mixer donated by Mack Trucks, Inc. and McNeilus Co.



The auction is only possible because the WOC owner, Hanley Wood, is a major supporter of CIM. The Hanley Wood WOC staff not only grants the NSC the right to hold the auction, but assists the committee in its promotion efforts. In addition they provide booths, meeting spaces, food and refreshments prior to the auction and significant onsite support during the auction. Every year, Ritchie Brothers Auctioneers donates their professional auctioneering expertise which includes promotion and advertising, auction catalogues and bid books, and conducts both the live and internet access auction. Morgan Stanley donates their time and expertise during the auction by collecting and processing payments for both the live and silent auctions.

Due to the efforts of everyone involved in making the auction a success and the outstanding industry support, proceeds from the 2011 auction exceeded \$507,000. This marks only the second time in CIM history that auction proceeds have exceeded the \$500,000 mark. Please lend your support to this important effort by either donating an item to be auctioned or by participating as a bidder at the 2012 auction being held at the Las Vegas Convention Center on January 25, 2012.



JULIE GARBINI

Chairwoman
Research Committee

THE CIM RESEARCH COMMITTEE continues to seek out opportunities to partner with universities and government entities with which the industry has collaborated in order to maximize the total research investment made by the industry. At a time when the industry's research dollars are limited, the committee is working to foster the important relationships between the five CIM universities, as well as other institutions, to increase their collective ability to leverage outside funding sources.

In addition to partnering with each other and industry-allied institutions, it is important to remember that the CIM universities can also partner with departments within their respective schools to carry out a multitude of research needs for individual concrete companies, associations and foundations. There are many benefits to funding research through one or more of the CIM universities. It is a way to support the institutions financially while getting needed industry research accomplished. The geographic spread and working relationship between the universities is a natural for projects where regional testing is needed. Their expertise in concrete and the learning opportunities for CIM students are also of great value to the industry.

For more information on how to satisfy your research needs through the CIM universities, please contact any of the institutions directly (go to www.concretedegree.com to link to the individual schools), or contact Julie Garbini at jgarbini@rmc-foundation.org.

FINANCE COMMITTEE REPORT



MICHAEL HARLAN

Chairman
Finance Committee

I AM PLEASED TO REPORT THAT, once again, the National Steering Committee (NSC) had an excellent year from a fundraising standpoint and remains well positioned financially. Proceeds from the World of Concrete (WOC) auction earlier this year far exceeded our expectations. As a result, current year revenue exceeded our 2010-2011 budget by almost \$80,000 and actual operating expenses were \$56,000 below budget for the year. For the full year, net cash flow was \$2,066, resulting in a slight increase in our year-end cash reserve balance. The five-year financial model developed in 2009 has provided a guide for the NSC to operate within its means and maintain more than two years of program funding in cash reserves.

As of June 30, 2011, the NSC had total assets of \$1.055 million, which consisted primarily of cash, marketable securities and certificates of deposit. While the year-end independent audit has not been completed, we are not aware of anything that could materially change our reported financial position and expect to receive an “unqualified” opinion from our auditor.

The following is a comparative summary of revenues and expenses for the past two years:

Revenue	FY Ended 6/30/10	FY Ended 6/30/11
Sponsor Organizations	\$185,000	\$115,000
Auction Proceeds	\$382,771	\$469,114
Interest Income	\$2,723	\$3,470
Total Income	\$570,494	\$587,584
Expenses		
Operating Expenses	\$192,783	\$150,518
Program Funding	\$460,000	\$435,000
Total Expenses	\$652,783	\$585,518
Net Cash Generated/Used	(\$82,289)	\$2,066

The 2010-2011 fiscal year marks the completion of the NSC's five year commitment to four of our five program universities. Under the current economic environment, it is apparent that these universities will require support from the NSC if we expect them to continue to provide quality graduates for the industry. Accordingly, the NSC will most likely be required to begin to utilize its cash reserves in future years to support the universities, particularly if future funding is not sufficient to satisfy these program funding needs.

While conditions in our industry remain challenging, the NCS is well positioned financially to continue its mission of advancing the concrete industry by degrees.





ALAN NEDZA

Chairman

Long Range Planning Committee

THE LONG RANGE PLANNING (LRP) committee was established as a standing group by the Board of Directors at the February 2009 meeting. Mike Shydrowski of BASF was the first LRP Chairman and, upon his retirement in 2010, I have replaced him as Chairman. It is not easy to replace someone like Mike, but I will work hard to make sure the plan continues to evolve so that CIM becomes even stronger in the future. The current work plan for the LRP was approved at the Board of Directors meeting held in Las Vegas in February 2010. Since that time we have made some adjustments due to the current economic environment and the business realities we face at this time. However, the vision and mission statements that were articulated in the original plan are still relevant today.

The vision of the CIM program is to be a resource to provide the concrete industry with professional leaders for tomorrow. We look to improve our industry one student at a time. The mission is to develop, support, promote and sustain a network of higher learning institutions with programs that produce future professional leaders with degrees in Concrete Industry Management. We represent a national, broad-based industry coalition in partnership with CIM institutions and local industry patrons groups, dedicated to a collaborative process to accomplish this goal.

During the year, not only did we reevaluate the vision and mission statement, but we also reviewed the committee's six strategic goals:

- Determine the emerging market needs for the Concrete Industry Management graduates regionally, nationally and internationally, and ensure the network of institutions is sufficient to meet those needs.
- Preserve and protect the value of the Concrete Industry Management brand.
- Determine the scope and outreach of the Concrete Industry Management Program.
- Promote the use of the Concrete Industry Management university network to conduct coordinated research that benefits the concrete industry.
- Determine the appropriate allocation of National Steering Committee funds in support of the Concrete Industry Management Program.
- Determine the long-term goal and leadership succession of the National Steering Committee.

There is no question that the tough economic times have taken their toll on our industry as well as the rest of the business community. Due to these circumstances, organizations have been forced to constantly review how they are spending their money and their resources. I am happy to report that even in these tough times, the industry and its associations continue to support the CIM program. As we all know, people are our most important asset and programs such as CIM are even more vital now than in the past. The challenges will continue, but the construction industry will be well positioned with individuals that have the necessary background and passion for our business to build a better tomorrow. There is a saying that the best way to predict the future is to create it. That is exactly what we are doing at CIM by graduating individuals to ensure the industry has the necessary leadership for a bright tomorrow.



ANNUAL INSTITUTIONAL CIM PROGRAM REPORT 2010-2011



DR. JAMES ERNZEN
ASU CIM
Program Director



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PROGRAM ENROLLMENT

	Undergraduate	Graduate	Total
Engineering College	4,725	2,290	7,015
School of Construction	311	59	370
CIM Program	53	0	53

Number of CIM Majors:

53 majors

FACULTY PROFESSIONAL ACTIVITIES

- Jim Ernzen attended the Concrete Bridge Professors Seminar sponsored by PCA in Chicago in August, 2010.
- All ASU CIM faculty accompanied 12 CIM students to the World of Concrete Convention in January, 2011.
- Jim Ernzen escorted student competition teams to both the Fall and Spring meetings of the American Concrete Institute.
- Ed Weaver attended the annual meeting of the Arizona Rock Products Association in June, 2011.
- Ed Weaver attended a concrete NDT seminar conducted by the Arizona Structural Engineers Association in June, 2011.
- Ed Weaver represented ASU at the Concrete Sustainability Research Conference conducted by MIT in August, 2010.



- Jim Ernzen serves as Student Activities Representative on the Board for the Arizona Chapter of the American Concrete Institute.
- Ed Weaver serves on the Concrete Technology Committee for the Arizona Rock Products Association.

PROGRAM SUPPORT

Scholarships

The CIM patrons awarded \$36,750 in scholarships during the 2010-2011 school year.

Summer Internships

Twenty-six CIM students needed internships as part of their curriculum path to stay on schedule for graduation and due to an outstanding commitment from our patrons, twenty-three secured work in the industry during the summer of 2011. Twelve of those students found work in the production arena while eleven worked in the construction field. Below is a list of the employers:

- AZ-ACI Arizona Rock Products Association
- Adolphson-Peterson Construction
- Baker Concrete Construction
- Cal Portland (2)
- Cemex (2)
- Drake Materials (2)
- Hanson Aggregates
- Hensel Phelps Construction (2)
- Holder Construction
- Home Builder in California
- LaFarge (2)
- McCarthy Building Construction
- Perini Building Co.
- Quikrete
- Salt River Materials Group
- Sundt Construction (2)
- Turner Construction

Student Educational and Marketing Activities

- Two CIM students attended the 3rd Quarter Mixer of the Arizona Masonry Contractors Association in August, 2010.
- The AZ-ACI chapter held a bowling party in August, 2010 in which four CIM students participated.
- Four CIM students assisted with the AZ-ACI chapter's annual Concrete Cup Golf Tournament in September, 2010 where they hosted a "marshmallow driving contest" that was a big hit!
- Over 30 CIM students attended the AZ-ACI Chapter lunch

meeting to hear a talk on pervious concrete in September, 2010.

- The student ACI Club sent two officers to the ACI convention in Pittsburgh, Penn. in October, 2010. CIM student Alex Bertheau, was honored as the third-place winner in the 2010 ACI student paper competition.
- Six students attended the October, 2010 meeting of the Phoenix ICRI chapter. Chuck Knight, the current President of ICRI National, spoke on the ICRI Slab Moisture Testing Technician Certification Program. The CIM program hopes to have students participate in the ICRI certification process as part of a CIM course in the future.
- ASU was recognized as one of twelve "Excellent Universities" for 2010 by American Concrete Institute.
- Twelve CIM students attended the World of Concrete 2011 convention in Las Vegas.
- Three students attended the NRMCA convention at CONEX-PO-CON/AGG in Las Vegas in March, 2011.
- The student club hosted a Spring Training Baseball Mixer for the patrons on March 5 at Tempe Diablo stadium as a way to say thank you for all the industry support. They bought 50 tickets to see the California Angels play the Chicago White Sox and organized a tailgate party before (and during) the game. About 25 students and an equal number of patrons were in attendance and everyone had a great time.
- The CIM 306 class participated in the ACI Concrete Construction competition in the spring of 2011. ASU entered three teams and the ASU-CIM teams placed 3rd, 6th, and 10th. Three members of the third-place team traveled to the ACI Convention to receive their award.
- Seven CIM students competed in the ACI FRP beam competition held in the spring of 2011. Due to a late start, the specimens cast by the teams failed to meet the competition specifications and were disqualified. Nevertheless the students learned valuable lessons that they will apply in future.
- Ken Riley with WR Grace volunteered his services in the CIM 105 in March, 2011 to demonstrate the art and science of creating concrete countertops. The result was a hands-on experience for the students with decorative concrete that resulted in two permanent pieces of beautiful concrete furniture for the CIM

classroom. There are plans underway to add concrete countertops to the CIM concrete lab as well.

- Over 30 CIM students attended the AZ-ACI Chapter lunch meetings in January, February and April 2011.
- Ten CIM students participated in AZ-ACI Chapter's awards banquet held in April 2011. The students organized the silent auction part of the event and netted over \$1,300 to support various chapter activities.

Student Community Service Activities

The CIM 405 Concrete Problems class took on a real-life project when a school staff member contacted the program in August 2010 about a "problem" with her driveway. The driveway slab had recently uplifted more than an inch at the joint with the garage slab, and a driveway side slab was severely cracked along with a masonry wall on the property line. The class was assigned the project to determine what caused the problem and performed a thorough condition survey of the property. They identified several potential problems and solutions. After presenting their findings to the owner, a course of action was decided upon and the students progressed to "Phase 2" which involved demolition of a portion of the damaged slab to search for a tree root suspected of causing the cracking and slab uplift. The students reconvened for 'class' on the property site and found the tree root. "Phase 3" included further demolition and replacement of a portion of the driveway later in the semester, including ordering, placing and finishing three cubic yards of concrete. Overall, this was an outstanding piece of service learning.

CIM student Josh Marriott is spearheading an effort to create an annual activity in which the CIM 105 students cast concrete furniture for use in various locations around the Valley. We worked with a local precaster who hosted the CIM 105 class at his facility this spring where they cast two benches. The beneficiaries of this student effort will be a residential community in the West Valley, whose members are active with ARPA. ASU met with the community this summer, and after some modifications, the two benches cast will be delivered in October.

The plan is for this service activity to continue each semester giving the students some hands-on experience with concrete materials

and donating their time to create something for others.

CIM Patron Involvement

- Southwestern patrons continue their active support of the program both in and out of the classroom. The patrons have met quarterly with the program faculty to ensure needs and expectations are met.
- Patrons provided faculty associates who taught or co-taught six CIM classes during the past school year.
- Patrons made over 40 guest speaking appearances in CIM classes this past year to share their expertise with the students.
- Arizona ACI Chapter sponsored CIM students with highly reduced rates for ACI certifications for Field Grade 1, Flatwork Finish Technician, Concrete Strength, Aggregate Level 1 and Lab Level I.
- Suntec Concrete sponsored the CIM Capstone Course in spring 2011.
- Southwestern patrons provided more than 25 field trips during the school year including trips to cement plants, ready mix concrete and aggregate operations, block and paver plants, testing laboratories, and concrete construction sites.

FINANCIAL INFORMATION

Income

	ASU
Industry/Patrons	\$55,000
National Steering Committee	\$75,000
University	\$189,000
Scholarships*	\$36,750
Total Income	\$355,750

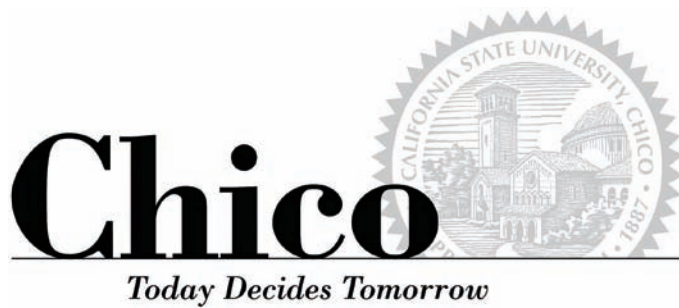
Expenses

	ASU
Salaries	\$275,000
Operating	\$25,200
Travel	\$16,835
Scholarships	\$36,750
Total Expenses	\$353,785

*All Scholarships are funded by local patrons organization



ANNUAL INSTITUTIONAL CIM PROGRAM REPORT 2010-2011



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2010-11 ENROLLMENT

	Number of majors
2006-2007	20
2007-2008	38
2008-2009	50
2009-2010	55
2010-2011	56

Graduates:

Spring 2011 – 17 graduates

Job Placement:

- 85% of spring 2011 graduates looking for industry jobs have been placed
- 95% of all previous graduates 2009-2010 looking for industry jobs have been placed

Geographic Representation of Intern and Job Placement 2009-11:

California, Oregon, Washington, Nevada, Colorado, North Dakota,
Kansas, Missouri, Maryland, Washington DC, New York



DR. TANYA KOMAS
CSUC CIM
Program Director



PROFESSIONAL ACTIVITIES

Chico State CIM Summer Field School at Alcatraz Island

- Golden Gate National Recreation Area, National Park Service
- Five-Year NPS Cooperative Agreement for 2011-2015 - \$160,000
- Summer 2010 Pilot Project Support: NPS - \$5,500; Industry - \$20,000, in-kind - \$16,600

Research

Dr. Komaz:

Proposal submitted to National Science Foundation: “Materials Research and Development of Collaboration for Preserving Historic Concrete Structures Based on New Silicon Reactive Technology” for NSF Chemistry and Materials Research in Cultural Heritage Science (CHS) program - involving other CIM schools and MIT Sustainability Hub, \$420,000 – pending; “Advanced Highway Surface Preparation/Protection Treatment: cooperative pavement project with Caltrans – ongoing; Historic Concrete Investigations at Pointe du Hoc, Normandy, France – ongoing; “Stadium” Service Life Prediction software industry implementation and classroom & senior capstone project integration

Presentations

Dr. Komaz:

ACI Strategic Development Council presentation “Pavement Preservation: Combined Method for Surface Preparation for Lithium treatment of ASR and/or Micro/Macro Texturing for Friction Enhancement” – based on joint project with Caltrans; CIM Update – California Precast Concrete Association; CIM Update & Non-Destructive Evaluation Guideline Document Presentation, International Concrete Repair Institute (ICRI); CIM Update & Alcatraz Field School Presentation, Association for Preservation Technology International/ICRI Northern California Chapters Lecture Series; Alcatraz Field School Information Booth/Display, World of Concrete





Tim Hostettler:

CIM Update - California Construction and Industrial Materials Association (CalCIMA); – CIM Update - Northern California Concrete Promotional Council; “Sustainable Attributes of Concrete as a Building Material” for CSU, Chico - “This Way to Sustainability” conference.

Student Projects/Certifications

ACI Field Testing Technician Grade I; ACI Flatwork Finisher; ICRI Floor Moisture Certification; ACI Concrete Construction Competition; Concrete Canoe Competition; Lighthouse Construction and Decorative Concrete Project for Artistry at World of Concrete; “Blitz Build” Winter Break Project: construction of two houses by College of Engineering students for the Chico Catalyst Domestic Violence Center.

Chico State Senior Capstone Projects: “Recycled Glass as an Aggregate Replacement in Concrete Block Manufacturing” for Basalite – continuation of Basalite Summer Internship; “Solar Infrastructure Concrete Construction: Design, Mix Design, Construction, and Business Plan” – developed for existing local company; “Life Cycle Analysis Using Stadium Software for Caltrans and CIM Student Learning” – included teaching other CIM students; “Compression Strength Tests and Water Requirements of Fly Ash Mixes” – continuation of CalPortland Internship; “Testing of New Shrinkage Compensating Impermeable Concrete Admixture Using Abrasion and Permeability Test Methods” – with local contractor; “Volumetric Mixer” (with Cementech) – used in Senior Capstone projects and community service; “Patrick Ranch Moat Restoration” – with local non-profit historical site; “Watertight Admixtures Testing” – continuation of Sika internship; “Chico State Alumni Glen Concrete Construction and Decorative Concrete Project: Architect and Contractor Roles” – major joint project with University Facilities Management; “Design and Construction of Custom Concrete Benches for RCE Department on Chico State Campus” – benches constructed and placed on campus; “Concrete Canoe Mix Design, Testing, and Construction” – joint project with Civil Engineering Department, resulted in “how to” manual for future years; “International Concrete Repair Institute’s ‘Surface Repair Inspector Certification’ Research and Testing” – research and test method development, presentation to ICRI Certification Committee.

Student Club: CIMSS (Concrete Industry Management Student Society)

Patron golf tournament; Campus Preview Day; numerous student social outings, College interdepartmental relationship/friendship-building competitions: Triple-Crown Champions in dodge ball, bowling, golf.

PROGRAM SUPPORT

Scholarships

Chico State CIM Patrons provided:

Fall 2010: 13 students, \$9,750 awarded

Spring 2011: 17 students, \$12,750 awarded

Leadership Award: 1 student, \$1,000 awarded

Internships

Mentored 18 students during summer 2010 in following fields:

- 5 - Repair, National Park Service
- 1 - Architecture
- 2 - Precast
- 1 - Construction consulting
- 1 - Contracting
- 1 - Highway construction
- 1 - Aggregate processing
- 4 - Ready-mix QC/production
- 2 - Block/sack concrete mix manufacture

Marketing Activities/Public Service

Forbes Magazine ranked CSU Chico as one of the top 20 “best colleges for minorities in STEM” the only CSU campus ... in fact the only public university in California ranked in the top 20.

Dr. Komars:

Development of several professional quality recruitment/PR videos (all available on YouTube): Chico State CIM Patrons, Chico State CIM Senior Capstone Projects, Chico State Alcatraz Field School, 3D Laser Scanning at Alcatraz, Red Barn Rehabilitation Project; “Blitz Build” Winter Break Project Leadership Team: construction of two houses built by College of Engineering students for the

Chico Catalyst Domestic Violence Center; Technical Advisor/ Participant for Industry Presentations to Congressional Delegation, Washington, DC; three CIM National Steering Committee meetings; two Chico State Patrons meetings/Founders' Dinners; two Chico State Patrons Officers' meetings, Sacramento; CIM Strategic Planning Retreat San Francisco; World of Concrete CIM/ Association Resources meeting; CONEXPO-CON/AGG; NRMCA; World of Concrete; two ICRI meetings chaperoning Chico and other CIM school students; Coauthoring "Surface Repair Inspector Certification" for ICRI; ICRI Board of Directors; Chairman - ICRI Evaluation Committee; Member of ICRI Education, Finance, Sustainability, and Certification Committees; Concrete Promotion Council of Northern California - Member, Architectural/Decorative Concrete Committee; Western States Bridge Preservation Task Group; Pavement Preservation Expert Task Group - American Concrete Paving Association Southwest Chapter/Federal Highway Administration; advisor to all Chico State CIM students; CIM Student Society advisor.

Tim Hostettler:

Chico State Preview Day; two Chico State Patrons meetings/ Founders' Dinners, one National Steering Committee meeting, Concrete Promotion Council of Northern - Member; CONEXPO-CON/AGG; NRMCA Sustainability Conference; World of Concrete; "Blitz Build" Winter Break Project Leadership Team; Alumni Glen project mentoring; Concrete Canoe project mentoring; Bob Bauman Memorial Golf Tournament organizational team – proceeds to CIM scholarship; CIM Student Society advisor; CIM Lab Coordinator; CIM Internship Coordinator.

Doug Guerrero, Chico State CIM Patrons Chairman:

Two Chico State Patrons meetings/Founders' Dinners; two Chico State Patrons Officers' meetings; CIM National Steering Committee Meetings; Houston Path Forward meeting; CIM Strategic Planning Retreat San Francisco; conducted tours of campus for prospective and incoming students; attended three National Steering Committee Meetings; participated in class lectures several times during year; participated in campus Preview Day; built strongest patron participation year to-date during 6th





year as volunteer Chairman; elected to Chico State Foundation Board of Governors and currently serves as Chairman.

Mike Ward, Dean, & Jerry Hight, Assistant Dean

Authored CIM Accreditation Criteria for NSC; two Officers' & Executive Committee Meetings, two Chico State Patrons Meetings/Founders' Dinners, three National Steering Committee Meetings; partnered on writing research proposals.

Student Educational Activities

Student travel to industry conferences and meetings (39 students): ACI - 2 students; ICRI - 10 students; Concrete Décor Show - 3 students; CONEXPO-CON/AGG - 4 students; NRMCA - 4 students; World of Concrete - 12 students; ASCC - 2 students; NRMCA Sustainability Conference - 2 students.

Field trips/tours: Lehigh Cement Plant and Quarry, Teichert Solar Array and Rock Plant Processing, Sierra Nevada Brewery Sustainable Manufacturing tour, A & A Concrete Supply Plant Operations; Caldecott Tunnel Construction Tour - San Francisco Bay Area, San Francisco Presidio – hands-on epoxy crack injection workshop; Alcatraz – concrete deterioration/repair tour.

Involvement of Patrons/Industry

Fall Chico State CIM Patrons Meeting (40 patrons attended) & Founders' Dinner (50 patrons & guests attended); Spring Chico State CIM Patrons Meeting (50 patrons attended) & Founders' Dinner (60 patrons & guests attended); CIM Strategic Planning Retreat San Francisco (10 Industry Executives attended); Second Annual CIM Student Society Golf Tournament; Patron panel judges for internship presentations and Senior Capstone presentations, numerous guest lectures in classroom and lab; provided substantial materials and in-kind contributions of time for laboratory coursework and special projects at WOC, Blitz Build, Preview Day, and Alcatraz.

FINANCIAL INFORMATION

Chico State Income/Expenses 2010-11

Income

	Chico State
Patrons	\$141,500
Patron Scholarships	\$23,500
National Steering Committee	\$100,000
University	\$84,730
Total Income	\$349,730

Expenses

	Chico State
Salaries	\$190,595
Operating/Equipment	\$53,070
Travel	\$46,265
Patron Scholarships	\$23,500
Total Expenses	\$313,430

CHICO STATE CIM PATRONS

(updated 8/16/2011)

Corporate Founders (5 years continuous gifting)

Cemex - 5
 Lehigh Southwest Cement/Hanson Aggregates - 5
 Teichert Materials - 6
 California Nevada Cement Association - 5
 Shamrock Materials - 5
 Vulcan Materials - 5
 California Portland Cement - 5
 Granite Rock Company - 5
 Central Concrete (U.S. Concrete) - 5
 Valley Rock - 5
 Western Ready Mix - 5
 Concrete Promotion Council of Northern California - 5

BASF - 5
California Precast Concrete Association - 5
U.S. Concrete Precast - 5
The Conco Companies - 5

Patrons (annual gifting)

Knife River - 4
Oldcastle Precast - 4
Grace Construction - 4
Livingston Concrete - 4
Quikrete - 4
Nevada Cement - 4
Mitsubishi Cement - 2
Basalite - 3
Propex - 4
Sierra Nevada Concrete Association - 2
Sika Corporation - 3
Salt River Materials Group - 2
Calstone Company - 3
Mel Marshall Industries - 4
A & A Concrete - 1
Umpqua Sand & Gravel - 2
Blastrac/Diamatic - 1
Structural Group - 1
Independent Floor Testing - 1

Personal Founders (5 or more years continuous gifting)

Jim & Leslie Repman - 7
Bill & Mari Albanese - 7
Doug & Kelly Guerrero - 7
John & Jamie Burghardt - 7
Allen & Carla Law - 5
Eugene Ceccotti - 5
Tom Albanese - 5
Don & Cathy Humphrey - 5
Tarek & Jennifer Khan - 5

Personal Patrons (yearly gifting or contributions)

Dana & Jerri Davis - 4
Greg & Laura Odenthal - 3
Rick & Tina Nelson - 3
Scott & Chantelle Perrine - 2

Contributors (one time gifting)

The Beavers Trust
Top Grade Construction
Nestech Development
Don & Lynn Kahler
John Halverson
RC Ready Mix
CVC Construction
Royal Trucking
Rich Ready Mix
Eugene Martineau
Michael Shydowski
Briggs Manufacturing
David Filipek
Right Away

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DR. HEATHER BROWN
*MTSU CIM
Department Chair & Professor*

PROGRAM ENROLLMENT

Semester	2008-09 (actual)	2009-10 (actual)	2010-11 (actual)	2011-12 (projected)
Fall	423	415	306	325
Spring	445	386	303	350

GRADUATES

Number of Graduates:

Fall 2010 – 32

Spring 2011 – 51

Summer 2011 – 9

MTSU CIM Patrons Board 2009-2010

Mrs. Erin Williams	President	Baker Ready Mix
Mr. Paul Ozinga	Vice President	Ozinga Concrete
Mr. Kyle Weatherly	Secretary	Stalite
Mr. Cody Eaton	Treasurer	Interstar

Awards

- Knight: 2011 Tennessee Concrete Association Director's Award
"For Consistent and Dedicated Service to the Concrete Industry in Tennessee"
- Brown: Special Project Award for "Net Zero Emergency Shelter Partnership"
- Brown: Faculty Who Make a Difference



- Brown: American Concrete Institute Excellent University of the Year 2010-2011, Faculty Advisor of ACI Student Chapter
- Brown: American Concrete Institute First Place Concrete Construction Competition - 5 undergraduates, Mentored by Dr. Brown
- Brown: Second place out of 25 Civil Engineering Schools, Concrete Horseshoe Competition, Cookeville, Tenn., March 25
- Brown: Seventh place out of 25 Civil Engineering Schools, Concrete Cubes, Cookeville, Tenn., March 25

Funding

New

- Brown: Pervious Concrete Research Compilation Update, \$5,000, summer 2011
- Brown: Spraylock Sealer/Densifier Research, \$5,000, spring 2011
- Brown: Metakaolin Comparative Performance Study, \$4,200, spring 2011
- Brown: TATE Access Floor Panel Research, \$1,800, fall 2011

Existing

- Yang: Development of Patching Materials for Rehabilitation of Surface Distresses in Concrete Bridges in Tennessee, TDOT, \$88,000, 01/01/2010, 18 months

Pending

- Brown: NSF CSH Grant - Materials Research and Development of Collaboration for Preserving Historic Concrete Structures Based on New Silicon Reactive Technology, MTSU Consultant Role, fall 2011 - fall 2013, \$0 for MTSU
- Knight, Yang and Brown: Thin Overlay Systems, TDOT, \$82,000, September 2011 - December 2012
- Yang: Developing High Performance No-Shrink Grouts for Anchoring Precast Concrete Panels of Bridge Decks, TDOT, \$76,000, 10/01/2011, 15 Months

Not Funded

Brown: STORM: Sustainable Training On Runoff Management, FISPE Sustainability Grant, \$537,259

Presentations

Technical

- Brown: "Research with Permeable Pavers," Belgard Environmental, Chicago, Ill., Sept. 23
- Brown: "Microbiologically Induced Corrosion in Precast Concrete," NPCA Annual Convention, Charlotte, NC, Jan. 28-29
- Knight: "NDT/NDE Challenges and Solutions in Tennessee Bridge Inspection," NDE/NDT for Highways and Bridges: Structural Materials Technology (SMT), American Society for Nondestructive Testing (ASNT), New York, New York, August 19, 2010
- Brown: Recycled Glass Pavement Presentation, Jen Hill Construction Materials, MTSU Campus, August 10
- Brown: "Pervious Systems for a More Livable Environment," Tennessee American Public Works Association, Nashville Convention Center, Oct. 25
- Brown: MTSU Campus Tour of Permeable Materials, Tennessee Stormwater Association, MTSU Campus, Oct. 19
- Brown: Permeable Paver Research at Gateway Village, Belgard Environmental, Murfreesboro, Tenn., April 15

Marketing/Promotion

- Knight: CIM Program Update, the 2010 ARMCA Mid-Year Meeting, Arkansas Ready Mixed Concrete Association (ARMCA), Tunica, Mississippi, September 18, 2010
- Brown: EYH workshop for middle school girls, MTSU Campus, September 25
- Brown: What is Civil Engineering? Blackman Middle School, November 30 and May 12
- Brown: Concrete Laboratory Presentation, Cane Ridge High School, August 24 and April 20
- Brown: CIM Update, Tennessee Concrete Association, Nashville, Tenn., Feb. 18
- Brown: WISTEM Panel Presenter on Engineering, MTSU Campus, Feb. 22
- Brown: Knox County College Fair, Knoxville, Tenn., Feb. 24
- Brown: CIM Career Paths, CEFGA College Fair, Atlanta, Ga., March 17&18
- Brown: University 1010 Lecture, Oct. 21, MTSU Campus, Guest Speaker
- Brown: University 1010 Lecture, January 26, MTSU Campus, Guest Speaker

- Knight: September 16-18, 2010, Presentations to the Arkansas Ready Mixed Concrete Association (ARMCA) Mid-Year Meeting, Tunica, Miss.

Publications

- Knight: "Tensile Capacity of Headed Studs as a Function of Concrete Tensile Strength," The National Bridge Conference and PCI Annual Convention Proceedings (elect), Precast/Pre-stressed Concrete Institute, June 2010
- Yang: "Freeze-and-Thaw Durability of Pervious Concrete under Simulated Field Conditions," ACI Materials Journal, Vol. 108, No. 2, March-April 2011
- Yang: "Development of Patching Materials for Rehabilitation of Surface Distresses in Concrete Bridges in Tennessee", quarterly report, July 2010 – September 2010
- Yang: "Development of Patching Materials for Rehabilitation of Surface Distresses in Concrete Bridges in Tennessee," quarterly report, October 2010 – December 2010
- Yang: "Development of Patching Materials for Rehabilitation of Surface Distresses in Concrete Bridges in Tennessee," quarterly report, January 2011 – March 2011
- Brown: "Measurement of TSS and Other Pollutant Removal by Pervious Concrete, ACI Special Publication on Pervious Concrete," 14 pages, April 30, 2011
- Brown: "The Development and Use of ASTM C1701 for Pervious Concrete," ASTM Pervious Concrete Symposium Journal, 12 pages, March 15, 2011
- Brown: "Evaluating Polish Resistance of Tennessee Bituminous Surface Aggregates, International Symposium on Pavement Performance, Trends, Advances and Challenges", 15 pages, January 15, 2011
- Yang: "Frost Damage Mechanisms and Durable Pervious Concrete Design," ACI 522 Special Publication -The Leading Edge of Pervious Concrete, submitted in March 2011
- Brown: Tennessee Concrete Magazine, Volume 24, No. 2, Summer/Fall 2010, CIM Update, page 46
- Brown: Tennessee Concrete Magazine, Volume 24, No. 3 Winter 2010, Turner Universal Awarded CIM Building, page 22
- Brown: Concrete Products Magazine, April 2011, MBA Program Update

- Knight: "NDT/NDE Challenges and Solutions in Tennessee Bridge Inspection," NDE/NDT for Highways and Bridges Structural Materials Technology (SMT) Proceedings, American Society for Nondestructive Testing (ASNT), 2010, 6 pages

Undergraduate Research Activities

- Yang: Development of Patching Materials for Rehabilitation of Surface Distresses in Concrete Bridges in Tennessee, Matthew Petree and Clayton Ingram, prepared testing specimens and performed tests
- Brown: TATE Access Floors - Blake Jenkins, Anna Spore, Casey McNeely – research
- Brown: Spinks/Lhoist Metakaolin Study - Jarvis Floyd, Clay Ingram, Scott Shaver, Dan Lozano – research
- Brown: SlagCem - Kaylah Brown, Andrew Bloebaum, Derek Dowdy, Mike Borella, Sawyer Shoates, Will Fultz, Josh Wilson – research
- Brown: ASCE Cube Team - Ken French, Seth Davidson, Aaron Fisher, James Hopper – competition
- Brown: Spraylock - Matt Petree, Katie Horn, Jeremy Brodioi, Harrison Lithxemay, Brandon Tusky
- Brown: Forta Fiber Shrinkage Reduction - Sara Andon
- Yang: CIM 4200, use of special cement and admixture for rapid-set high-early strength concrete, total of 36 students

Undergraduate Internships

82 undergraduate internships that were mentored by Dr. Heather J. Brown

Experiential Learning

- Brown: TEKLA software training, January 6-7, 10 students.
- Brown: GATE Precast jobsite tour, Nordstrom Store Green Hills Mall, 6 students
- Brown: CIM 4800 Decorative Concrete, 29 Students, Soccer/Track Decorative Concrete Project: Corey Willmore, Drew Hodge, Brittany Shroeder, Daniel Coffman, Chase Estes, Meagan Hamm, Matt Petree, Adam White, Shane Blissard, Jeremy Brodioi, Dejarvis Floyd, Cory Powell, Josiah Standridge, Jason Carter, Sawyer Shoates, Mitch Eakin, Anna Spore, Scott Shaver, Matt Russell, Richard Axt, Tom Diedrich, Nathan Tenpenny, Joe Evers, Ronnie O'Neal, Mason Peters, Chris McMaster, Matthew

Vandegrift, Corey Jeacock, Tony Vignaroli

- Brown: 2 Acres of Hope Concrete Foundation – Paul LeGuenec, Bryan Fox, Kurt Goethert, Michael Bugbee (4 students)
- Brown: Homeowner concrete driveway – Kurt Goethert, Bryan Fox, Paul LeGuenec, Harrison Lithxemay (4 students)
- Brown: Homeowner concrete patio – Bryan Fox, Katie Horn, Kelly Cloud, Harrison Lithxemay, Kurt Goethert (5 students)

Service

- Brown: “Protective Behavior of Textile Reinforced Concrete in the Repair and Strengthening of Structural Concrete Members,” ACI Special Publication, February 2011, Reviewer
- Brown: CONBUILDMAT-D-11-00248, “Reduction of interior temperature of mass concrete using suspension of phase change materials as cooling fluid,” Construction & Building Materials, Reviewer, March 2011
- Brown: IEEE Cement Conference, 37 Presentation Copyright Reviewer, May 2011
- Brown: ASTM C09.49 Symposium Chairman, January 2011 – December 2011
- Brown: *American Society of Concrete Contractors, Salt Lake City, September 17-19, Committee Member and Faculty Chaperone (4 students)
- Brown: American Concrete Institute, Oct. 25-26, Pittsburgh, Penn., ACI 522 Committee member, ACI Certification Board meeting
- Brown: Concrete Décor Rockettown Charette, November 15, Project Committee (20 students)
- Brown: ASTM C09.49 Meeting, December 5-6, Committee Member
- Brown: World of Concrete Trade Show, Jan. 17-20., Las Vegas, Nev., Faculty Chaperone, Board/Committee Meetings, CIM Auction (12 students)
- Brown: Concrete Décor Tradeshow, March 15-18, Faculty Chaperone (20 students)
- Brown: CONEXPO-CON/AGG Tradeshow, March 21-23, Las Vegas, Nev., Faculty Chaperone, Committee Meetings (24 students)
- Brown: American Concrete Institute, April 3-5, Tampa, Fla., ACI 522 Committee member, ACI Certification Board meeting, Faculty Chaperone (4 students)
- Brown: NRMCA Strategic Planning Committee, Houston, Texas, May 17
- Brown: IEEE Conference, St. Louis, Mo., May 22-24 (4 students)
- Yang: ACI 522 Special Publications – The Leading Edge of Pervious Concrete, April 5, 2011, Reviewer
- Brown: Low Impact Development Committee, Nashville, Tenn., February 15
- Brown: Earth Day Tree Planting Event, MTSU Campus, April 22, 2011
- Brown: McFadden Rain Garden Project, McFadden Elementary, spring 2011 – current, construction of a sidewalk
- Brown: Habitat for Humanity, fall and spring Construction Day
- Knight: Served as Instructor for Professional Engineer Review Course (2 dates)
- Knight: ACI Field Technician Certification Program/Concrete Field Testing Technician –Grade 1 Examiner (6 dates)
- Knight: ACI Laboratory Technician Certification Program/Concrete Strength Testing Technician Examiner (3 dates)
- Knight: ACI Aggregate Technician Certification Program/Aggregate Testing Technician Examiner (3 dates)
- Knight: ACI Inspector Certification Program/Concrete Construction Special Inspector Examiner (4 dates)
- Brown: NSC fall meeting, Oct. 14-15, San Marcos, Texas, Board and Committee meetings
- Brown: Patrons fall meetings, Oct. 21-22, MTSU Campus, Board of Directors meeting
- Brown: Lafarge Social, Dec. 2, Foundation House, Faculty Chaperone (50 students)
- Brown: CIM Fifth Annual Women In Concrete Luncheon, MTSU Campus, Coordinator (12 students)
- Brown: ET Open House, mentored 4 student group posters, April 27
- Brown: ACI Club Faculty Advisor 2001 – current
- Brown: AGC Club Faculty Advisor 2010-2011
- Knight: March 19-21, 2011, attended 2011 National Ready Mixed Concrete Association Annual Convention with CIM undergraduate students, Las Vegas, Nev.
- Knight: October 13, 2010, organized tour/review of local concrete masonry unit manufacturing plant, 10 CIM students participated in tour
- Yang: Curriculum Committee
- Brown: CBAS Advisory Board Meeting, Co-Op office, Lavergne,



Tenn., March 26

- Brown: Brian Bachner Thesis Committee
- Brown: Spring Gilson Thesis Committee
- Brown: Julie Im MS Graduate Committee
- Brown: Landon McKee MS Graduate Committee
- Brown: Bahir Amekudi MS Graduate Committee
- Yang: Academic Appeals Committee
- Brown: MTSU Faculty Civic Engagement Committee
- Brown: MTSU Public Service Committee
- Yang: Scholars Week Judge

Industry Sponsored Interviews

- Advanced Testing Co-Op (8 positions)
- AGC – Administrative Assistant
- Aggregate Industries
- ASCC
- Baker Ready Mix
- BASS Concrete
- Brundage Bone
- Buzzzi UNICEM
- Canyon Contracting
- Capitol Aggregate
- Ceco Concrete
- Contec Construction, Tenn.
- Continental Cement Co.
- Delta Companies
- DVC Ready Mix
- ESC Southeast
- Gerdau Ameristeel
- IMI Nashville
- IMI Indiana
- Jackson Precast
- Lafarge
- Lehigh Hanson
- Maschmeyer Concrete
- McCarthy Concrete
- Middle Tennessee Testing
- Morgan Construction
- New Interstate Concrete
- Northeast Precast
- Ozinga Ready Mix
- Propex
- Ready Mix | Lafarge A&C, West
- Ready Mix Concrete of Somerset

- Rotondo Weirich
- Russ Tech, Inc.
- S&ME, Inc.
- Stego Industries
- Tekla
- Wayne Bros.

Demonstration Project

Two pervious rehabilitation projects on MTSU campus with the following partners:

- CemenTech
- Metro Ready Mix Concrete
- IMI, Inc.
- Buckeye Fibers
- Tennessee Concrete Association
- Vulcan Materials
- C2 Products
- Ditch Witch
- Tennant Sweepers
- Momenive
- Bunyan USA
- Multivibe, Inc.
- Propex US

FINANCIAL INFORMATION

Income

	Middle Tennessee
Patrons	\$62,834
Patron Scholarships	\$84,062
National Steering Committee	\$100,000
University	\$634,658
Total Income	\$881,554

Expenses

	Middle Tennessee
Salaries	\$609,908
Operating	\$80,973
Travel	\$57,017
Scholarships	\$84,062
Total Expenses	\$831,960

ANNUAL INSTITUTIONAL CIM PROGRAM REPORT 2010-2011



DR. MOHAMED
MAHGOUB
NJIT CIM
Program Director



Department of Engineering Technology
University Heights • Newark, New Jersey 07102-1982 • (973) 596-8193

Program Enrollment by Year

	Fresh.	Soph.	Junior	Senior	Total
2009-10	8	4	11	7	30
2010-11	4	5	15	11	40
Net Change	+1	+1	+4	+4	+10

ENROLLMENT DATA

Marketing Activities

- A new CIM graduate, Anlee Orama, was hired to help in recruiting and marketing.
- There were 10 high school visits, 4 high school trips to campus, 4 college fairs visited and 4 transfer fairs for county colleges. Presentations to encourage students to join the CIM program were performed and brochures and gifts were distributed.
- CIM students attended 6 on-campus events to promote the CIM program internally within NJIT.
- Four newsletters have been electronically mailed to all Northeast industry contacts and patrons. Hard copies were also distributed to the students interested in the program.



- CIM Blog has been created to introduce potential students to CIM program and activities.
- Invitations have been sent to undecided engineering students and business students to attend various CIM socials.
- CIM events have been publicized on NJIT calendar and website.
- NJIT offers in-state tuition to all students in the CIM program no matter what their state or country of residence.

PROFESSIONAL ACTIVITIES

- Job and internship placements were 100%, which is incredible in this economy.
- Student enrollment has increased from 22 students to 40 students. This number excludes the 6 graduating students in spring 2011, which is the highest number since the program began.
- Approximately \$20,000 in scholarship funds were distributed thanks to the patrons and ICRI Metro New York Chapter.
- Ten CIM students became ACI Field Level 1 certified thanks to the N.J. ACI Chapter. Fifteen CIM students became pervious concrete certified technicians thanks to PCA and NRMCA. Twenty CIM, CE and CET students took the basic training in BIM thanks to Tekla.
- The ACI student chapter was established and connections were made with other on-campus student organizations.
- CIM students attended ten conferences and participated in two international competitions.
- CIM students had more than 100 different activities such as field visits, seminars, socials, guest speakers, conferences and on-campus workshops and gatherings.
- CIM students visited the World Trade Center twice to observe the new state-of-the-art building construction.

PROGRAM SUPPORT

- The annual fund from the national patrons.
- The annual Northeast Patrons Wine Tasting Event held in February.
- Scholarship programs available to CIM students include: Silvi Scholarship, Sika Scholarship, CIM Northeast Patrons Endowed Scholarship and ICRI.

Student Internships

In spring 2011, two CIM students finished their internships successfully. During the summer of 2011, four CIM students were placed into internships positions.

PATRON INVOLVEMENT

It is through the continued support of the Northeast patrons, through their time and investment that the CIM program will be a continued success. A few examples of that great support are:

- Offer CIM students internships, co-ops, and jobs.
- Provide CIM students with a golden opportunity to network and a chance to better understand the career potential. This happens during conferences, socials and organizational activities.
- Keep the students engaged, and encourage and guide them as they progress through the program.
- Provide support to undergraduate concrete research through supplies, donations and guidance.
- Allow plant tours, hold socials and offer guest lecturers and field visits.

RESEARCH

- Undergraduate: The Use of Interlocking Soil/Cement Blocks in Modern Urban Construction.
- Masters: Obtaining High Strength Concrete Using Recycled Aggregate Concrete by Matching its Gradation to Normal Aggregate Concrete.
- PhD: Seismic Characterization of Recycled Aggregate Concrete.

COMMITTEES

Dr. Mahgoub is a member of the following American Concrete Institute (ACI) committees:

- 130 (Sustainability of Concrete)
- 342 (Evaluation of Concrete Bridges and Bridge Elements).
- 343 (Concrete Bridge Design). This is a joint committee between ACI-ASCE (American Society of Civil Engineers).
- 440 (Fiber Reinforced Polymer Reinforcement)
- 555 (Concrete with Recycled Materials)

Dr. Mahgoub is also a member of ASCE.

PUBLICATIONS

- “Seismic Properties of Recycled Aggregate Concrete,” M. Ala Saadeghvaziri, M. Mahgoub, and Amin Jamali, First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, SMAR. February 8-10, 2011. Dubai, United Arab Emirates.
- “Obtaining High Strength Concrete Using Recycled Aggregate Concrete by Matching its Gradation with Normal Aggregate Concrete Power Gradation Curve,” Mahgoub, M. and Bassiouny, M., International Concrete Sustainability Conference, National Ready Mix Concrete Association (NRMCA), August 9-11, Cambridge, Mass.

AWARDS

Dr. Mahgoub was awarded Portland Cement Association (PCA) Travel Award to attend a five-day workshop titled “2011 PCA Combined Professors’ Workshop” August 1-5, 2010 in Skokie, Ill.

PROPOSALS

- RMC Research & Education Foundation of National Ready Mix Concrete Association, “The Use of Interlocking Soil/Cement Blocks in Modern Urban Construction”
- RMC Research & Education Foundation of National Ready Mix Concrete Association, “Study on Recycling Waste Latex Paint in Pervious Concrete”

FINANCIAL INFORMATION

Income

	NJIT
Industry/Patrons	\$50,000
National Steering Committee	\$100,000
University <i>(in-kind, not included in total)</i>	\$142,000
Scholarships	\$5,000
Total Income	\$155,000

Expenses

	NJIT
Salaries	\$11,000
Operating	\$35,000
Travel	\$50,000
Scholarships	\$13,000
Total Expenses	\$109,000



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**DR. VEDARAMAN
SRIRAMAN**
TSU CIM
Program Director

ENROLLMENT DATA

Semester	Fall 2009	Spring 2010	Spring 2011
Texas State University	30,805	29,275	31,015
Department of Engineering Technology	436	425	444
CIM Program	13	21	41

The first group of students is expected to graduate in December, 2011.



PROFESSIONAL ACTIVITIES

Ongoing Research

- J. Hu, D. Hahn, W. Rudzinski, C. Powell, N. Guven, S. Lee, and G. Beall, "Evaluation, Presentation and Repair of Microbial Acid-Produced Attack of Concrete," Project sponsor(s): TxDOT (RTI 0-6137), funded August 2009, amount \$252,557, September 2009 - present
- S. Lee, J. Hu, C. Gaedicke and Y. Kim, "Synthesis of Microsurfacing Successes and Failures," Project sponsor(s): TxDOT (RTI 0-6668), funded November 2010, amount \$49,931, November 2010 - present
- F. Bektas and J. Hu, "Use of Waste Clay Brick as Cement Additive in Concrete: Feasibility Study in the State of Texas," Funding Source: Texas State University-San Marcos Research Enhancement Program (REP), funded December 2009, amount \$16,000, January 2010 - December 2010
- Gaedicke, C., "Optimizing Pervious Concrete to Improve Pavement Sustainability," Funding Source: Texas State University-San

Marcos Research Enhancement Program (REP), funded December 2009, amount \$8,000, January 2010 - December 2010

- Y. Kim, S. Lee, "Performance Properties and Prediction Models of Low-Energy and Low Carbon-dioxide Polymerized Binders," Funding Source: Texas State University-San Marcos Research Enhancement Program (REP), funded December 2009, amount \$8,000, January 2010 - December 2010

Pending Proposals:

- J. Hu, Y. Kim and S. Lee, "Synthesis on Cost Effectiveness of Extradosed Bridges," proposal submitted to TxDOT (RTI 0-6729), March 2011, amount \$49,984
- Y. Kim, J. Hu, and S. Lee, "Synthesis Study of Traffic Signal Systems," proposal submitted to TxDOT (RTI 0-6670), March 2011, amount \$49,995
- S. Lee, J. Hu, and Y. Kim, "Evaluation of Bonus/Penalty Pay Adjustment Systems for HMA and Ride Specifications of Concrete and Asphalt Pavements," proposal submitted to TxDOT (RTI 0-6675), March 2011, amount \$229,382
- K. Stephan, J. Hu and A.T. Wilder, "Rapid Field Detection of Moisture Content for Base and Subgrade," proposal submitted to TxDOT (RTI 0-6676), March 2011, amount \$247,537
- S. Lee, J. Hu, Y. Kim, and G. Winek, "Costs Associated with Conversion of Surfaced Roads to Un-surfaced Roads," proposal submitted to TxDOT (RTI 0-6677), March 2011, amount \$118,112

PUBLICATIONS AND PRESENTATIONS

Publications

- J. Hu, K. Wang, J. A. Gaunt, "Sequestering Lead by Utilizing Lead-Based Paint (LBP) – Contaminated Masonry Materials as Recycled Aggregate in Portland Cement Concrete," *Journal of Solid Waste Technology and Management*, accepted for publication, Vol. 37, No.4, November 2011
- J. Hu, Z. Wang and Y. Kim, "Feasibility Study of Using Recycled-Concrete Fine Aggregate in Self Consolidation Concrete," accepted by 2011 International Concrete Sustainability Conference, August 9-11, 2011, Boston
- Y. Kim, J. Hu, S. Lee, B. J. Broughton, "Prediction of Compressive Strength of Aerated Lightweight Aggregate Concrete by Artificial Neural Network," *Advanced Materials Research*

Journal Special Publication, accepted for publication, International Conference on Green Power, Materials and Manufacturing Technology and Applications (GPMMTA), July 2011

- Mi-Gume So, Y. Kim, Gun-Gin Yun, Shirley Dyke, and Thomas G. Harmon, "Cyclic Shear-Friction Constitutive Model for FEA OR R/C Membrane Elements," *ACI Structural Journal*, Vol. 108, No. 3, May-June 2011, pp. 324-331
- J. Hu, K. Wang, "Effect of Coarse Aggregate Characteristics on Concrete Rheology," *Journal of Construction and Building Materials*, Vol. 25, No. 3, March 2011
- S. Lee, J. Hu, H. Kim, S. N. Amirkhanian, K. Jeong, "Aging Analysis of Rubberized Asphalt Binders and Mixes Using Gel Permeation Chromatography," *Journal of Construction and Building Materials*, Vol. 25, No. 3, March 2011
- V. Sriraman and J. Hu, "A New Construction Related Degree at Texas State University-San Marcos," *Proceedings of the 2011 Conference for Industry and Education Collaboration (CIEC)*, February 2-4, 2011
- Q. Xu, M. Ruiz, J. Hu, K. Wang, R. Rasmussen, "Modeling Hydration Properties and Temperature Developments of Early-Age Concrete Pavement Using Calorimetry Tests," *Thermochimica Acta*, Vol. 512, No. 1-2, January 2011
- Y. Kim, J. Hu, S. Lee, "Mechanical Properties of Aerated Lightweight Aggregate Concrete," *Magazine of Concrete Research*, accepted for publication, 2011
- Y. Kim, T. Harmon, B. You, "High Performance Precast Wall Panels with Shear Transfer Provided by Carbon Fiber Grid," *Advanced Materials Research Journal*, accepted for publication, 2011
- J. Hu, K. Wang, J. A. Gaunt, "Design Concrete with Recycled Lead-Contaminated Deconstructed Masonry Materials as Aggregate," *International Conference on Sustainable Urbanization (ICSU 2010)*, Hong Kong, China, 15-17 December 2010
- Y. Kim, J. Hu, S. Lee, B. You, "Mechanical Properties of Fiber Reinforced Lightweight Concrete Containing Surfactant," *Advances in Civil Engineering*, accepted for publication, November 2010, doi:10.1155/2010/549642
- Roesler, J., Gaedicke, C., "Flexural Behavior of Concrete Specimens on Various Soil Support Conditions," *7th International DUT-Workshop on Design and Performance of Sustainable and Durable Concrete Pavements*, 2010



- J. Hu, K. Wang, J. A. Gaunt, "Recycling Lead-Based Paint Contaminated Deconstructed Masonry Materials as Aggregate for Portland Cement Concrete - A Cost Effective and Environmental Friendly Approach," Resources, Conservation and Recycling, Vol. 54, No. 12, October 2010

Presentations:

- J. Hu, Z. Wang and Y. Kim, "Feasibility Study of Using Recycled-Concrete Fine Aggregate in Self-Consolidation Concrete," accepted by 2011 International Concrete Sustainability Conference, August 9-11, 2011, Boston
- J. Hu, K. Wang, J. A. Gaunt, "Design Concrete with Recycled Lead-Contaminated Deconstructed Masonry Materials as Aggregate," International Conference on Sustainable Urbanization (ICSU 2010), Hong Kong, China, December 15-17, 2010
- V. Sriraman and J. Hu, "A New Construction Related Degree at Texas State University-San Marcos," 2011 Conference for Industry and Education Collaboration (CIEC), San Antonio, Texas, February 2-4, 2011
- J. Hu, Construction Materials [Concrete], Environment and Sustainability Concept, Texas State University-San Marcos, BIO 7360U/PHIL 4388/5388/ SOCI 5371 - Sustainability, April 22, 2011
- 2010 TACA Environmental Seminar, "Recycling Lead-Based Paint Contaminated Deconstructed Masonry Materials as Aggregate for Portland Cement Concrete – A Cost Effective and Environmental Friendly Approach," San Antonio, Texas, September, 2011

COMMITTEES

Dr. Hu is a member of the following technical committees:

- ACI Committee: 130 Sustainability of Concrete, 237 Self-Consolidating Concrete, 238 Workability of Fresh Concrete, 555 Concrete with Recycled Materials
- Texas Department of Transportation (TxDOT) Research Management Committee (RMC) Technical Advisory Panel (TAP) Member (RMC 1 - Construction and Maintenance, RMC 5 - Structures and Hydraulics)

Dr. Gaedicke is a member of the following technical committees:

- ACI Faculty Network

- ACI Committee 446 – Fracture Mechanics of Concrete
- ACI Committee 215 – Fatigue of Concrete

Dr. Kim is a member of the following technical committees:

- PCI Seismic Committee
- PCI Design Handbook Committee

PROGRAM SUPPORT

Scholarships

- Eight CIM majors received CIM scholarships ranging from \$800 to \$2,000 (with a total of approximately \$12,400) for Spring 2011.
- The ACI Central Texas Chapter awarded two Rodney Davies Memorial scholarships to Texas State CIM majors (Daniel Calhoun and Garrett McSpadden) and graduate student (Zhuo "Joe" Wang) at \$1,000 each on December 9, 2010.
- The ACI San Antonio Chapter awarded three scholarships to Texas State CIM majors (Charles Carter, Travis Mouser and Griffin Taylor) at \$1,500 each on December 10, 2010.

Donations and In-kind Gifts

- ACI Central Texas Chapter donated \$3,000 to the Texas State CIM Program in December 2010.
- CommandAlkon donated the CommandBatch program to the Texas State CIM Program. The program has been installed and was used in CIM courses in Spring 2011.
- Martin Marietta Materials donated a concrete vibrator to Texas State concrete lab in July 2010.

MARKETING ACTIVITIES

- ACI Central Texas Chapter held their May monthly luncheon at Texas State University on May 12. More than 20 ACI Central Texas Chapter members and ten CIM faculty, staff and students attended the meeting. Part of this event included a detailed walk-through of our concrete testing laboratory.
- Texas State Bobcat Day was hosted on April 16, 2011. More than 80 prospective students and parents visited the Department of Engineering Technology booth and learned about the CIM program.
- A CIM social and recruiting event was organized by Dr. Rich Szecsy (TACA president) and the ACI Texas State Student

Chapter at Pluckers, San Marcos on April 13, 2011. More than 30 industrial representatives, CIM faculty members, CIM students and prospective students attended the event.

- VIP Counselor Showcase at Texas State - Eight high school counselors from the San Antonio area visited the concrete lab and learned about CIM program on April 12, 2011.
- The first Texas State Construction & Concrete Industries Job Fair was held on Thursday, February 24 in the LBJSC Ballroom. Fourteen companies attended the job fair.
- The Fall CIM NSC meeting was held at Texas State University-San Marcos from October 14-15, 2010. Over 50 guests attended the event. Part of this event included a detailed walk-through of our concrete testing laboratory. Texas State's upper administration including the president, provost and the dean of college of science attended the event.
- Information about the CIM degree was presented to construction and undecided majors in TECH 1260 Introduction of Concrete and Construction Industry.

STUDENT PROJECTS

- Texas State CIM team won second place in the Sustainability Category of ACI Egg Protection Device Competition at the ACI Fall 2010 convention.
- Texas State CIM team participated in the World of Concrete 2011 Pervious Concrete Competition and won the first place in the permeability category (5th overall).
- CIM students participated in constructing a concrete abutment for the relocation of a timber bridge, casting concrete slabs for a picnic area, and installing picnic tables and barbeque grills in the Allan Woods community located in San Marcos on April 29 and 30, 2011.
- The ACI Texas State Chapter, one of the student organizations in the College of Science, attended the College of Science Big Bang Bash at Sewell Park Stage in San Marcos on April 22, 2011.

STUDENT EDUCATIONAL ACTIVITIES

- On April 16, 2011, 19 students took the ACI Field I Certification exam in Texas State's concrete lab with the assistance from the ACI Central Texas Chapter.

- Seven CIM majors were placed in internships in the summer of 2010 and three CIM majors were placed into internships in the summer of 2011.
- On November 23, 2010, CIM majors took a field trip to Texas State University's LBJ parking garage which is a building that was fabricated from precast/prestressed products.
- Approximately 30 CIM and CM majors attended a plant tour at Heldenfels Enterprises, Inc. on precast/prestressed concrete structures on March 4, 2011.
- Approximately 20 CIM students visited the Lehigh Cement Plant in Buda, Texas, on February 24, 2011.
- Eight CIM majors attended the World of Concrete 2011 convention in Las Vegas, Nev. in January 2011.
- Two CIM majors attended the ICRI spring convention between March 16 and 18 in Houston, Texas.
- CIM majors and faculty attended the ACI Central Texas Chapter and the ACI San Antonio chapter meetings.
- Five students attended the ACI Fall 2010 Convention in Pittsburgh, Penn.

PATRON/INDUSTRY INVOLVEMENT

- Texas State patrons met on October 15, 2010 and March 30, 2011 in San Marcos, Texas.
- Victor Bretting of TAS Commercial Concrete Construction was named the Chairman of the Events Committee.
- Our mission statement, objectives and outcomes received the approval of the patrons in April 2011.
- Both ACI San Antonio and Central Texas Chapter provided support for scholarships.
- Provided speakers for the ACI student chapter.
- Provided CIM students the opportunity to participate in industrial plant visits.
- Ten industrial guest speakers made presentations in CIM courses.
- Provided internship opportunities.
- Provided supplies for our concrete testing lab.
- Assisted with fund generation and recruitment.

FINANCIAL INFORMATION

Income

	TSU
TSU Patrons (to date)	\$191,000
National Steering Committee	\$60,000
TSU Operating Budget	\$85,000
Total Income	\$336,000

Expenses

	TSU
Operations (travel, materials, equipment, etc.)	\$87,759
TSU Faculty Salaries	\$191,000
Total Expenses	\$278,759

OTHER NEWS

- Texas State University was recognized as an ACI Excellent University during the opening session at ACI Spring 2011 convention at Tampa, Fla.
- A new studio-style classroom was commissioned to facilitate project-based learning and to accommodate the senior design project needs of our CIM and CM curricula in the summer of 2010. The room has the capacity to stage a 40-seat lecture and includes 17 high-end computer stations for implementing planning, design and analysis activities.
- Dr. Yoo Jae Kim joined the CIM program in the fall 2010. Dr. Kim holds a doctoral degree in civil engineering from Washington University in St. Louis. He is a registered Professional Engineer and is LEED AP certified. Dr. Kim holds multiple certifications from ACI and PCI and served as a project structural engineer with High Concrete Group, LLC in Denver, Pa. from 2005 to 2009. His research interests are in the area of testing and modeling of construction materials and the implementation of material characteristics and performance models into mechanistic design and analysis.
- Dr. Cristian Gaedicke received the Professional Engineer (PE) certification from the State of Texas in May 2011.





LEIGHTON REYNOLDS, Middle Tennessee State University

Where are you from originally?

I was raised in Bradford, Tennessee, a very small town located in the western part of the state.

Why did you choose the CIM program and MTSU?

When questioning which career path I would take after graduating high school my senior year, my brother Nathaniel Reynolds, who had previously graduated from the CIM program at MTSU, encouraged me to research not only Middle Tennessee State University's campus, but the CIM program specifically. He continuously expressed how kind and helpful the CIM faculty and staff was to their students and made me realize that by being a part of the CIM program, I would not only have a great support system, but have a higher chance of obtaining a job after I graduate based on the program's job placement percentages. After hearing and researching this field of study, I had to join the program.

What is your current major and anticipated graduation date?

I am focusing on the production sales and service side of the CIM major with a minor in business. I intend to graduate December, 2012.

Have you completed any internships while at MTSU? If so, could you tell us a little more about your experiences?

The internship that I completed mostly consisted of producing precast concrete products. My experience was labor intensive and gave me a chance to further my hands-on learning experience with finishing concrete in precast molds. The experience was very worthwhile because it taught me about colored concrete, testing and curing procedures, and the difference in the mix design of precast concrete and regular slab concrete. Based on my experience, I believe having a hands-on experience with concrete is just as good, if not better an opportunity to learn about the material, than being in the classroom learning from a professor.

How has the CIM program prepared you for the "real world"?

The program has taught me the importance of basing all decisions that I make around not only what is best for the company I work for, but what is best for my surrounding environment as well as the local community. While working for a concrete company, there are many environmental problems that could arise if the appropriate decisions are not made and precautions are not taken.

What advice would you give to current CIM students?

The advice that I would give CIM students is to not lose the eagerness to learn and to have the courage to ask questions. Many internships that you will be involved with in the future will teach you many things and have the potential of teaching more if you simply ask questions. Like we have all heard through our many years of education, "the only dumb question is the question not asked."

GARRETT McSPADDEN, Texas State University

What school are you currently attending and when is your intended graduation date?

I am currently attending Texas State University and I expect to graduate in May 2014 with a double major in CIM and physics.

Why did you choose this university and the CIM program?

I chose Texas State for the weather and the intimacy not offered by larger colleges. The CIM program is perfect for someone seeking a practical degree that will be applicable almost anywhere in the country or world. It just seemed right for me.

How has the CIM program prepared you for your graduation and entrance into the business world?

I look forward to working in the technical sector of the concrete industry, perhaps in repairs. CIM continues to teach me everything there is to know about concrete's technical and business aspects.

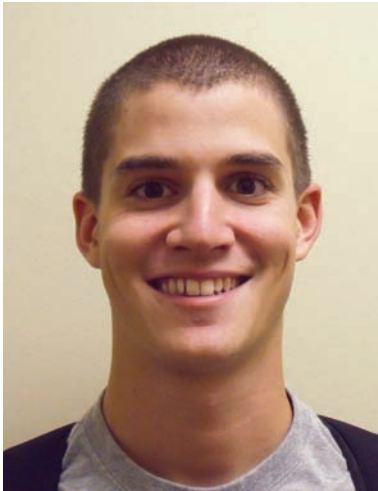
What advice would you give to other current CIM students?

Learn everything you can about everything you can. The more irons you have in the fire when you graduate, the more prepared you will be.

Have you been able to interact with the CIM patrons at MTSU? If so, in what capacity?

Other than a few meet-and-greets, I have not had the privilege of interacting with students or faculty from different schools, including MTSU. The short meetings I have had with representatives, however, have shown me that Texas State is not the only CIM university with very knowledgeable and highly competent staff.





PAXTON PARKER, Texas State University-San Marcos

What school are you currently attending and when is your intended graduation date?

I attend Texas State University-San Marcos and I plan to graduate in the summer of 2013.

Where are you from originally?

I am from McKinney, Texas which is just north of Dallas.

Why did you choose this university and the CIM program?

One reason I chose the CIM program was that the Air Force ROTC had a chance for technical degree students to acquire a scholarship that would pay for all of my tuition. Also, I chose this degree because it was a new program and it seemed like it would be a lot of fun to try and that there is always a job market for concrete.

How has the CIM program prepared you for your graduation and entrance into the business world?

The CIM program has taught us all we need to know about concrete. Our curriculum starts with the basics of concrete, and continues to a further in-depth study of concrete – both chemically and physically. We continually meet people from the industry who come to visit and give speeches or who come to our labs and help us with our projects. We also take field visits to different concrete facilities and tour the plants to see how concrete is made and learn all the functions of each plant.

What advice would you give to other current CIM students?

Have fun with the program. The teachers are willing to help you learn and will not let you fail. You just have to put in the effort.

The CIM program works with businesses in providing summer internships. Have you been able to take advantage of that program or any other special program to develop your industry knowledge?

I have not yet been able to take part in the summer internship program because of my Air Force ROTC commitment. I do hope to be able to participate in the internships next summer and grow more in our industry.



NICOLAS DENICOLI, New Jersey Institute of Technology

What school are you currently attending and when is your intended graduation date?

I am currently attending the New Jersey Institute of Technology, with an anticipated graduation date of fall 2012.

Why did you choose this university and the CIM program?

I chose NJIT because it was the only college that offered the CIM program in my area. I chose the CIM program because it combines my love for construction with my love for being outdoors.

How has the CIM program prepared you for your upcoming graduation and entrance into the business world?

I have only been enrolled in the program for one semester, but CIM has allowed me to get involved in an internship this summer at a precast plant. I was also fortunate enough to start my career with a ready mix company as an assistant quality control manager. CIM has opened the door for both of these opportunities.

What advice would you give to other current CIM students?

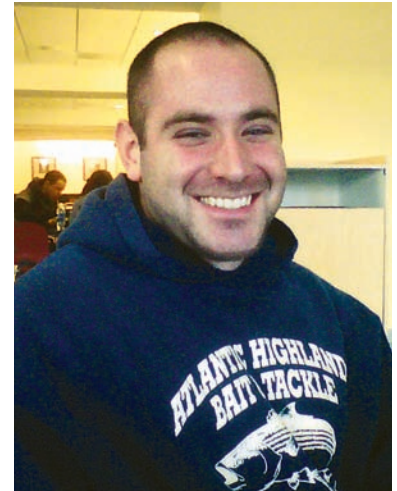
Be active in the program, and get as much experience as you can!

The CIM program works with businesses in providing summer internships. Have you been able to take advantage of that program or any other special program to develop your industry knowledge?

I was immediately hired as a quality control technician at Jersey Precast. This gave me a great deal of experience and knowledge. I was also able to get my ACI field tech level 1 certification through NJIT for free. This is also a big bonus of the program.

Have you been able to interact with the CIM patrons at your school? If so, in what capacity?

Yes, I have been able to interact with Jamie Gentoso who is the chairperson of the Northeast Patrons. Mrs. Gentoso also teaches several CIM courses, and she has numerous industry connections. She is very knowledgeable about the concrete industry, and goes out of her way to help our class in any way possible.





CHRISTOPHER WORTHINGTON, New Jersey Institute of Technology

Where are you from originally?

I am from Sayreville, New Jersey.

Why did you choose the CIM program and NJIT?

I initially chose NJIT because I wanted to enroll for an in-state architecture program. Knowing that the amount of applicants for architecture was high, I also applied for other programs - one of them being engineering technology. When I was accepted into NJIT, I was placed into the CIM program which is under the engineering technology department, but I planned to switch to architecture after my first semester. However, as I learned more, I realized that the opportunities that CIM provides are unlike that of any other major at NJIT, so I decided to remain a CIM student.

What is your current major and anticipated graduation date?

My current major is Concrete Industry Management, and I also have a minor in business. My anticipated graduation date is in the fall of 2012.

What classes did you enjoy the most?

There were two classes I enjoyed most. The first is Concrete Properties and Testing and in this class was the first time that I actually designed and mixed a batch of concrete. The second class I enjoyed was Marketing, where I worked on a team in which our goal was to invent and then market a product.

How has the CIM program prepared you for the "real world"?

With most majors, graduates have only theoretical knowledge and virtually no contacts within their industry. I believe CIM has prepared me for the real world because not only do I acquire theoretical knowledge, I also gain field knowledge from attending visits to companies within the industry, performing lab work, and completing a mandatory internship. Through attending conferences and socials, CIM also allows me to network with people in the industry who may be future employers or colleagues.

What advice would you give to current CIM students?

I would tell current CIM students to be active in the program by attending conferences and participating in ACI student chapter activities. Industry representatives will notice this and be more inclined to offer an internship or job if they see a student who is motivated.

SCOTT RENFREE, California State University, Chico

What school did you graduate from and in which year?

I graduated from California State University, Chico in May of 2010.

Where are you currently working and what are your responsibilities?

I am currently working as a Project Engineer for STRUCTURAL in their Chicago branch and I am one and a half years into the PECD (Project Engineer Career Development) Program. The intent of the program is to help offer comprehensive preparation to become a future leader by aiding in professional growth and development through different aspects of the company. This is accomplished through a total of 10 rotations that provide exposure to the many levels of everyday company operations. Currently, I am floating between the Project Management and Estimating rotations which often finds me managing smaller projects and preparing estimates/proposals for those opportunities that come into the branch.

Why did you choose this position and this company?

I was drawn to working for STRUCTURAL due to the fact that they are a specialty contractor with a focus in concrete repair. Being that the focus of the CIM program at Chico State is also concrete repair, it seemed to be a perfect fit! Never did I imagine myself traveling the country working in and out of industrial facilities such as oil refineries. There is an amazing feeling of accomplishment that comes from being able to take a structure that has completely failed and repair it back to perform as good, if not better, than original design.

How has the CIM program prepared you for your current job responsibilities?

The CIM program prepared me by providing opportunities to see and experience just how large the concrete industry really is. The program provided me with the basics of concrete repair, all the way to the fundamentals of project management. The CIM program exposed me to an amazing industry early in my career, allowing me to gain the confidence I needed to be able to jump in with both feet on my first day at STRUCTURAL.

What advice would you give to current CIM students?

The one piece of advice that I would have to give any current CIM student would be as follows: The CIM program exists to help provide opportunities so you can succeed, but at the end of the day it is only YOU who can get the most out of the program....so don't limit yourself!





ANDREW BILLINGSLEY, California State University, Chico

What school did you graduate from and in which year?

I graduated from California State University, Chico in May, 2011.

What is your current position and responsibilities at California State University Chico?

I am co-teaching two of the CIM upper division courses, CIMIT 348 (Concrete Repair) and CIMIT 364 (Decorative Concrete) and teaching the CIMIT101(Introduction) on my own as a faculty member at CSU Chico.

Why did you choose to begin your career at CSU?

I chose to teach this school year while I apply to graduate schools for fall 2012. I hope to pursue a master of science degree in architecture.

Why did you choose the CIM program?

I chose the CIM program because it was a new degree being offered and I wanted to be on the ground floor. Having grown up with a family business that deals exclusively with decorative concrete, I felt I could step in with experience already under my belt. However, I wanted to learn the technical side of the industry as well, and the CIM program was the best way to do that.

What classes did you enjoy the most?

My favorite courses were the repair and decorative courses. The decorative course opened my mind to other techniques around the industry and the repair course allowed me to express my passion for history through my work dealing with historical preservation.

What advice would you give to current CIM students?

I would tell them to keep with it, attend all the socials and conferences they can, network as much as possible, and have fun. Because if you don't enjoy what you do, what is the point in doing it?

ANLEE ORAMA, New Jersey Institute of Technology

Which CIM program are you involved with and what are your responsibilities?

I am thrilled to be part of the CIM program at NJIT. My responsibilities as CIM Specialist include performing recruiting and educational activities on and off campus, writing and preparing promotional materials for the CIM program, traveling with and coordinating travel plans with CIM students to multiple venues, assisting students in securing internships, and networking with patrons and industry and much more.

How did you become involved with this school and the CIM program?

Upon admission into NJIT, CIM was not offered and I was not aware that the program even existed. I initially majored in civil engineering, and despite doing well in my courses, I found myself unmotivated by my third year. I had an appointment with then chairman of the CE department, John R. Schuring, to discuss my academic progress. I felt I needed a change in my course of study and the first thing he told me was "Are you aware of the CIM program?" From that moment on, I became the first CIM student at NJIT and never looked back.

Why should incoming students consider CIM as a major course of study?

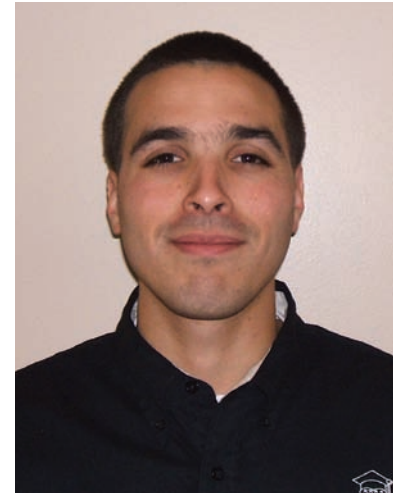
CIM is a turbo-charged major pumping out highly qualified concrete industry professionals. Students interested in the concrete industry can venture into many facets of the program including concrete construction, sales and marketing, decorative concrete, sustainable design, quality control and management. CIM helps to prepare students to be the future leaders in the concrete industry. In addition, job placement is currently 100 percent for NJIT CIM graduates. The sky is just the starting line for students that choose CIM as their future.

What are your thoughts about the industry/academic partnership between CIM and its industry partners?

As a 2009 graduate of the CIM program, I have experienced first-hand the high interest employers have taken in the program. My previous employer, Craig Testing, attended a patrons meeting at NJIT to learn more about the CIM program. I am often asked if any CIM students are interested in taking open positions available. Industry partners not only provide much appreciated financial assistance to the program, but also provide support in the form of time and effort speaking to students, facilitating industry visits, attending meetings, and just being there for us.

What is your vision for the CIM program?

I believe the need for CIM trained students will always be high. The key is to continue marketing CIM to the masses and secure a steady flow of prospective students into the program to match the needs of industry. At NJIT, we are fortunate to have the demand from patrons and industry and we are working to increase the supply and even out the curve.





DR. YOO-JAE KIM, Texas State University-San Marcos Assistant Professor

Which CIM program are you involved with and what are your responsibilities?

I became involved in the Texas State University-San Marcos CIM program in the fall of 2010. My responsibilities include teaching CIM courses, conducting concrete research, advising students, and maintaining contact with national and local professional chapters.

What interesting projects have your students been involved with during this last school year?

CIM students have been involved with many research projects including Self-Consolidating Concrete, Pervious Concrete, and Recycled Concrete, etc. The most interesting of these was a community outreach project in which CIM students participated in constructing a concrete abutment for the relocation of Timber Bridge. The students were involved in casting concrete slabs for a picnic area and installing picnic tables and barbeque grills in the Allan Woods Community located in San Marcos. These were excellent opportunities for students to use the skills and knowledge they have learned in class while giving something back to their community.

Can you describe the different career paths that graduates of the CIM program can take?

The CIM program's emphasis is on concrete technology, management, and business administration, unlike conventional engineering technology degrees that offer a single discipline. It is also possible to pursue multiple career path options such as management and consulting positions, or with cement and concrete associations.

What is unique about the graduates of the CIM program?

The unique features of the CIM program include the interdisciplinary availabilities and the extent of industry involvement in the students' education. CIM coursework offers an outstanding opportunity to build strong technical skills in concrete technology and construction-related concrete with a solid management background. Moreover, the partnership that exists between the CIM program and its patron organizations offers students a direct hands-on experience through industry seminars and conferences. These opportunities help our graduates apply themselves to real-world business goals.

What are your thoughts about the industry/academic partnership between CIM and its industry partners?

The CIM program has tremendous support from the industry patron organizations. Patrons provide significant opportunities for student involvement with the industry, including guest lecturers, field trips, and a variety of social activities.

JAMIE GENTOSO, New Jersey Institute of Technology

What is your involvement in the CIM program? Why did you get involved with the program?

Currently, I serve as the chair of the Patrons committee for NJIT. In addition, I am an adjunct professor at NJIT and am fortunate to teach the CIM 101 class where students get their first introduction to the industry. I got involved with the program because I personally am very passionate about the concrete industry. Upon graduation, I was employed by a cement manufacturer and have built my career in the industry. I feel that it is very important to give back to the industry that has given so much to me. In addition, even as a civil engineer, I learned very little about concrete in college as we were always taught to design in steel. It's imperative for the growth and success of our industry that we get involved in academia and shape young minds to think concrete.

Why have you and your company made the commitment to the CIM program? What benefits do you think it will bring to your company?

My company, Sika, is a huge supporter of the program. Locally, we were involved with NJIT from the conception of the program and have continued to be big supporters. The concrete industry is not sexy, so it can be difficult to attract degreed professionals who just envision driving concrete trucks. This program serves to educate not only the students, but the community at large that concrete is an important, impressive and complex building component that demands an educated work force. The program is a great benefit to our company, as it provides help (interns) during the busy construction season and CIM graduates who can "hit the ground running" upon hire.

What are your thoughts about the industry/academic partnership between CIM and its industry partners and patrons?

This program, like no other, offers students access and insight into the concrete industry. Before graduation, the students get the opportunity to attend industry functions, conventions and events giving them the ability to mingle with the concrete professionals who may offer them a job in the future. The patrons work to ensure that all the students receive valuable internships, education, and scholarships in hopes of improving and growing the industry with young, well-prepared professionals.

Why should other companies in the concrete industry get involved in the CIM program?

The CIM program is a benefit to all companies in the concrete industry and it's up to each one to take advantage. The program graduates students with actual experience and knowledge in the industry. There is little to no learning curve for these new hires. In addition, by getting and staying involved, we (the patrons) have the ability to help shape the program such that the students graduate with the most practical and up-to-date industry knowledge.





ROBERT ELLIOT, Middle Tennessee State University

What is your involvement in the CIM program? Why did you get involved with the program?

In the early 1990s, our Industry identified three areas of concern for our future. Those areas identified were: 1) the aging workforce – over 60 percent of managers were over 55 years of age, 2) industry image, and 3) education. Ready Mix 2000 was an industry initiative to address these and other problems for the future. While lecturing classes at MTSU on “Design and Control of Concrete Mixtures,” I suggested the idea of a four-year degree program in Concrete Industry Management to department heads and the Dean of Applied Science and they agreed to investigate the possibilities of such a program. The industry support was overwhelming, and hence the birth of CIM.

Why have you and your company made the commitment to the CIM program? What benefits do you think it will bring to your company?

Lafarge North America realized the potential benefits of this program and has placed many graduates in management roles in our ready mix operations. I see CIM graduates frequently during the course of doing business, and I find them to be very professional and knowledgeable.

What are your thoughts about the industry/academic partnership between CIM and its industry partners and patrons?

The partnership between the concrete industry and MTSU was not fully appreciated until a group of patrons, along with MTSU’s President Dr. McPhee, met with the Secretary and Under Secretary of Education in Washington D.C. The concrete industry and MTSU had solved the “disconnect” between industry and higher education and the Secretary of Education wanted to know how the patrons accomplished this so he could use our success in other industries with other universities. Dr. Keese, Dean of Applied Science at MTSU guided the local patrons in our role and suggested we set up a National Steering Committee.

Why should other companies in the concrete industry get involved in the CIM program?

With the CIM program, there is now a source for young energetic professionals to expand your company’s business. The graduates from the CIM programs are changing the concrete industry daily.

How can they get involved?

Companies can get involved in a number of different ways like joining a CIM patrons group, providing internships for students, interviewing CIM graduates for job openings, and continuing to support the program financially.

What is your vision for the CIM program?

My vision for the program includes local patrons groups promoting the program to potential students (500 at each of the five universities), an online master’s degree program and a curriculum that evolves with the industry.

WADE POSTON, Middle Tennessee State University

What is your involvement in the CIM program? Why did you get involved with the program?

I have been involved with the CIM program since its conception in 1995. I am a past president and present member of the Board of Directors of the CIM Patrons Group for MTSU. I have also served as an adjunct professor at MTSU. I participate regularly as a guest lecturer and have assisted the staff with various initiatives in support of CIM, including working closely with the president of MTSU. I sincerely believed this program would enhance the image of the concrete industry while providing much needed management and technical training for future leaders of our Industry.

Why have you and your company made the commitment to the CIM program? What benefits do you think it will bring to your company?

The CIM program has shown the ability to take the concrete industry to a new level of professionalism through education – improving the overall image of concrete and the concrete industry. The cement industry as a whole, not just Holcim, has always been committed to education. Where can you find a better value for your time, talent and treasure than investing in education of your own Industry? Holcim has used the CIM program as a training ground and has successfully filled positions from logistics to sales with program graduates.

What are your thoughts about the industry/academic partnership between CIM and its industry partners and patrons?

I have very strong feelings about the CIM industry and education partnership. It has been touted by the United States Secretary of Education as a model for all universities on the relationship between industry and academia. The Governor of Tennessee has stated that the CIM program should be used as a model for other universities to ensure that the end product is something that Industries desire. This relationship between the concrete industry and the university is unique. The CIM program has incorporated specific requirements from Industry which results in a higher percentage of graduates being placed after graduation.

Why should other companies in the concrete industry get involved in the CIM program?

All companies in the concrete industry should support the CIM program because it gives the industry knowledgeable managers and creates a higher professionalism in the industry. This means that more companies will be run in a business-like manner which helps every single owner and manager. The CIM program gives everyone in the Industry a unique way to learn new technologies and employ graduates that can carry their business to the next level.

How can they get involved?

There are many ways to get involved. Use your time, talent, and treasure.

Time: Lecture and help out with community projects.

Talent: Share your experiences and expertise and mentor students.

Treasure: Donate to the patrons which are always looking for funds to assist the learning experience for the students of CIM.



ASSOCIATIONS



PROVIDING THE MEANS TO ADVANCE CONCRETE CONSTRUCTION



**The following resources are a vital part of the curriculum in all of the CIM universities.
Association publications and websites play a huge role in developing and maintaining the program —
they allow our curriculum to be current and relevant.**

American Concrete Institute (ACI)

American Concrete Pavement Association (ACPA)

American Concrete Pipe Association (ACPA)

American Society of Concrete Contractors (ASCC)

American Society for Testing and Materials (ASTM)

Concrete Reinforcing Steel Institute (CRSI)

Federal Highways Administration (FHWA)

Hanley Wood

International Concrete Repair Institute (ICRI)

National Concrete Masonry Association (NCMA)

National Precast Concrete Association (NPCA)

National Ready Mixed Concrete Association (NRMCA)

Portland Cement Association (PCA)

Precast/Prestressed Concrete Institute (PCI)

The Masonry Society (TMS)

The Post-Tensioning Institute (PTI)

ADVANCING THE CONCRETE INDUSTRY BY DEGREES

Recognizing the need for people with enhanced technical, communication and management skills, the Concrete Industry Management (CIM) program was developed in 1996 at Middle Tennessee State University (MTSU). The individuals graduating from this program have the skill set necessary to meet the growing demands of the progressively changing concrete industry of the 21st century. It is a business intensive program, providing solid management skills that can be used in any industry, but has been developed specifically for the concrete industry. The program gives students many advantages including entering the concrete work force with exposure to the industry early in their careers, unlike others coming in with generic business degrees.

The goal of the program is to produce broadly educated, articulate graduates grounded in basic business management, who are knowledgeable of concrete technology and techniques and are able to manage people and systems as well as promote products or services related to the concrete industry. It entails a broad range of courses, from English and history to science and mathematics. A series of required business courses such as finance, marketing, management and business law are also taken throughout the length of the program. The concrete-specific courses teach the fundamentals of concrete, properties and testing, concrete construction and more. All of these courses provide much more than what is simply in the text – they emphasize problem solving, quality assurance and customer satisfaction. They utilize practical case studies and an internship to make sure the student obtains real-world experience essential to starting a successful career.



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The need for such a program was recognized and put into action by the concrete industry. The end-result was a partnership between the concrete industry and MTSU to develop the CIM program, implementing it with its first two students in 1996. Available at MTSU, Arizona State University, California State University, Chico, the New Jersey Institute of Technology, and Texas State University, San Marcos, the program has been successful for both the industry and the graduates.

THE NATIONAL STEERING COMMITTEE

Administrative bodies were needed within the concrete industry to manage participation, guidance, and other forms of support related to the program. A grassroots advisory group, the CIM Patrons, was formed to raise funds, promote the program, recruit and mentor students, and provide guest lecturers for classes. A National Steering Committee (NSC), made up of pioneering concrete industry executives, was established to provide oversight to the CIM curriculum and supply guidance for general program direction from a national perspective.

The NSC Board of Directors includes the leadership of long-standing CIM financial supporters RMC Research & Education Foundation (RMCREF) and the Portland Cement Association (PCA). It has been joined by the National Ready Mix Concrete Association (NRMCA), the American Society of Concrete Contractors (ASCC), The American Concrete Pipe Association (ACPA), National Concrete Masonry Association (NCMA), the National Precast Concrete Association (NPCA), the Precast/Prestressed Concrete Institute (PCI) and the American Concrete Institute (ACI) Foundation.

For more information, visit www.concretedegree.com.

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