

# IRMCA News

Summer 2011 Vol. 30, No. 3

Illinois Ready Mixed Concrete Association

**World's  
Tallest  
Building**

**Concrete  
Industry  
Summit**

**Legislative  
Update**

**Projects**

*Bridgeview, Champaign,  
Decatur, Glenview,  
Louisville, Monticello,  
Peoria, Salem*

**IRMCA  
turns  
30**

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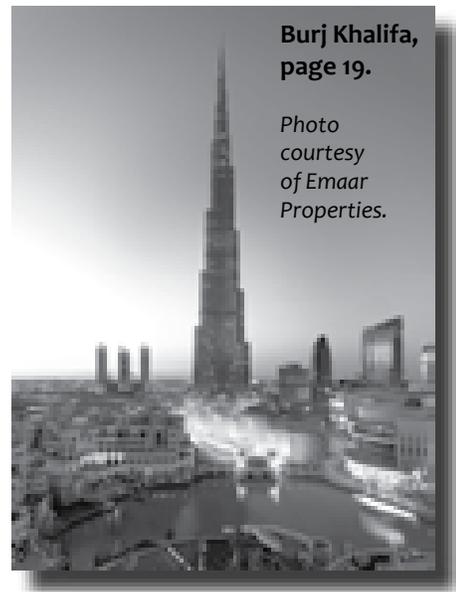
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**Cover photo is of Miller Hyundai  
in Peoria.**



# IRMCA NEWS

Volume 30, Number 3 • Summer 2011

## Illinois Ready Mixed Concrete Association



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*Working together to create value,  
teach excellence, and produce quality.*

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### Mission

To be the voice for the ready mixed  
concrete industry in Illinois. To promote  
the use of quality ready mixed concrete  
through innovative educational programs.

To accomplish common goals as an  
organization that cannot be done individually.

# CSH at MIT

The Portland Cement Association and the RMC Research & Education Foundation (loosely affiliated with NRMCA) have committed \$10,000,000 to the Massachusetts Institute of Technology (MIT) for the creation of the Concrete Sustainability Hub (CSH). The donors and MIT set goals and the studies are underway. MIT is addressing the project in 2 phases. First they are working on a Life-Cycle Cost Analysis Model (LCCA) for concrete and next they will address the sustainable nature of concrete.

Some initial results are in and they are many. RMC has a web page called Life Cycle Assessment Reports and Briefs at [www.rmc-foundation.org/MIT\\_CSH.htm](http://www.rmc-foundation.org/MIT_CSH.htm). Here you will find a list of various reports to read.

For further information you can visit <http://web.mit.edu/cshub/>, which is the web site for the CSH.

Please note that though the CSH research is important, MIT will not be promoting concrete. It is the industry's hope that this project at a very prestigious university will provide base information that will allow associations and companies to develop informed and documented strategies for promoting why concrete is best.

## NEW MEMBERS

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# A Great Day for the IRMCA Scholarship Golf Outing

The weather on September 7th was perfect for golf; Pines Lake Golf Club in Washington was in good condition; players were in great moods; there were more prizes and winners than ever; and the staff of volunteers kept everyone properly hydrated! Most importantly, because of our generous participants and sponsors, IRMCA was able to add significant monies to the IRMCA Scholarship Fund. Many thanks to all who came and partook of the great day!

The IRMCA Board of Directors met on September 6th and voted to allot \$10,000 for scholarships in 2011. If eligible students apply, a \$5,000 scholarship will be awarded to a student in the CIM program at Middle Tennessee State University, and \$2,500 scholarships will be awarded to a student at the University of Illinois at Urbana-Champaign and a student at Bradley University. The scholarship amounts were raised because school officials commented that the lower amounts were generating very little interest – zero at some schools. The board will determine each year which schools and programs to support with the intention of maintaining involvement with as many as possible.

From left: Candy Van Hook and Marlene Shepherd; Jim Randolph and Dick Plimpton; Denny Oedewaldt and Gary Grinter.

## RECEPTION SPONSORS

- Barnes Industrial Group**
- Big River Industries**
- Buzzi Unicem, USA**
- Cemex**
- Continental Cement Company**
- ESSROC Cement Corporation**
- Hanson Material Service**
- Holcim (US)**
- Illinois Cement Company**
- Lafarge North America**
- Lehigh Cement Company**
- McNeilus Company**
- St. Marys Cement**
- Vulcan Materials Company**
- WR Grace & Company**





Clockwise from left: George “hole-in-one” Zima; John Cheek, Scott Maberry, Rick Conlin and Jeff Helgesen; John Geyston and Carol Hustedde; Dan Stevens, Rob Piestrzynski and Steven Fleming; Bob Nowicki.



*2011 marks the 30th anniversary of the Illinois Ready Mixed Concrete Association. For this issue we searched archives for photos from the past 30 years.*

Clockwise from top right: Eric Harm, Joyce Raspolich and Terry Murphy; Richard Cosgrove, Jack Thelen, Ed Shields and Rich Schwend; Rich Schwend, Lou Marcy and Ray Michels; Harvey Hagge, William Hansen, Richard Cosgrove and Don Bjork; Jim Amundsen, Rob Nelch, Dan Stevens, Jack Schaus and Jon Vrabel; Mike Doll, Jim Fiala and Bruce Grohne.





Clockwise from below: **Ray McVeigh, Dick Plimpton and Jon Vrabel; 1997 Annual Convention attendees; Jerry Woods, Rob Nelch, Jay Nolan, Joyce Raspolich, Jim Randolph, Jon Vrabel, Tom Campbell, Jim Amundsen and Dan Edwards; Front: Richard Cosgrove, Dan Edwards, Harvey Hagge; Middle: Rich Schwend, Mark Blager, John Albinger, Dan Stevens, Bob Brown; Back: Herb Hustedde, Tom Clarke, Sieb VanderWagen, Jack Thelen, Rob Nelch.**

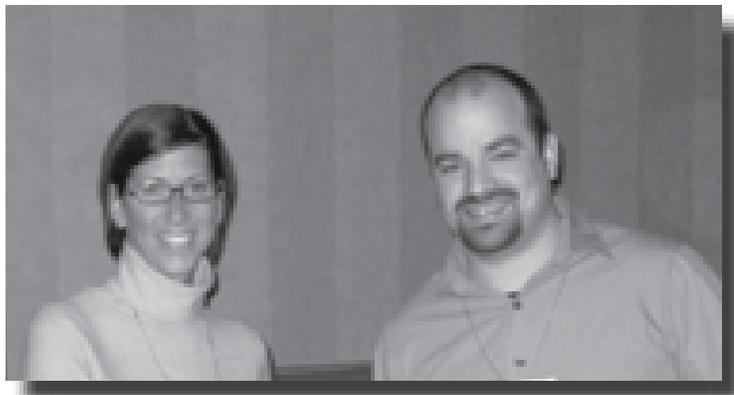


# ←.....ASSOCIATION NEWS.....→



Clockwise from above: Dan Garreffa and Kevin Mahoney; Mike Moeller and Randy Riley; Tim and Brad Huiner; Dan Stevens, John Albinger and Don Ingwell; Daren Fortin, Bill Bohr, Joe Baker, Tom Clarke and Rich O'Connell; Mike Winter, Thorlow Baker, Harvey Hagge, Wayne Johnson and Ray Michels; Bump and Scott Steidinger, Kevin Rustemeyer and the "Pour Boys."





Clockwise from below: **Chris and Brad Doll; Jim Amundsen, Tom Williams, Chuck Deichmueller and Bill Plantan; Rich Schwend, Herb Hustedde and Dennis Probst; Jake Miller, George Mobarak, Tom Addenbrook and Wayne Hickey; Steve Dearth, Cathy Sukley, Lori Loffredi and Lonnie Carr; Cheryl Moeller and Justin Ozinga; Steve and Tom Flynn, Ron Conolly and Paul Flynn.**



## **Louisville School and Bank Choose Concrete**

When designing a new parking area for North Clay Elementary – Jr. H.S., Louisville school officials and their consultants allowed competitive bidding for both concrete and asphalt. Concrete came in low! The project was awarded to K & A Lewis Construction of Dietrich, and IRMCA member Mid-Illinois Concrete of Effingham supplied the concrete.

Down the street... ..just north of North Clay Elementary, the Louisville Banking Company is finishing their new, attractive facility, at which all of their pavements are ready mixed concrete. The concrete was supplied by IRMCA member Flora Ready Mix of Flora. Way to go, Louisville!



**Louisville Banking Company and North Clay Elementary**



## No More Asphalt for Salem McDonald's

Like many other McDonald's owners in Illinois, Timtam, Inc. in Salem decided it was time to tear down the old restaurant and build a more modern one on the same site. When the owners were planning the new restaurant, one decision was made quickly: NO MORE ASPHALT. They were tired of rutting, tired of constant sealing and the requisite re-striping, tired of continual maintenance, and they were anxious to brighten the parking areas. The owners specified concrete and were pleased when the concrete price proved comparable to asphalt. IRMCA member Quad-County Ready Mix delivered the concrete from its Salem operation.

*Promotion Note: Many McDonald's are being torn down and built anew. Several, like Salem, have chosen concrete this second time through. Watch your local McDonald's carefully and, if you hear bulldozers coming, get the concrete story out in front of the local owners quickly – they are the decision-makers.*





## Bridgeview Toyota Park RCC

**On August 23, IRMCA member Prairie Material hosted a very successful seminar at Toyota Park in Bridgeview. The event, which highlighted Roller Compacted Concrete (RCC), was attended by over 125 municipal officials from Chicago and the surrounding suburbs, architects, engineers, and other interested industry personnel.** The morning's agenda called for speakers, a placement demonstration and lunch with more discussion.

Presenters were Jerry Larson, Director of the Indiana Ready Mixed Concrete Association; Wayne Adaska from the Portland Cement Association; and Matt Mann, Public Works Director for the Village of Streamwood. Jerry related the success of RCC placements in Indiana and

answered several questions. Wayne talked about RCC from the PCA viewpoint and explained the *Guide for Roller-Compacted Concrete Pavements*, which was given to every attendee. Finally, Matt talked about the RCC placements in Streamwood (complete with video) and expressed how pleased the village is with the product.

Unfortunately, Mother Nature intervened rather forcefully just as attendees arrived at the demo site. While getting slightly wet, folks were able to view previously placed RCC and to watch Orange Crush LLC (a Chicago-area asphalt company) place and roll at least part of a truckload. Attendees were invited to come back at a later date to watch good-weather placement. Congratulations to Prairie for getting the word out about Roller Compacted Concrete.



## Garden Hills Elementary

When Champaign Unit 4 School District and Garden Hills Elementary School officials were planning expansion, care was taken to be as sustainable as possible in all areas of construction, including stormwater management. After learning about pervious concrete, officials chose to use it for the new parking lot, sidewalks and bike paths. All other new surfaces (e.g., playground and front drive) were built with conventional concrete.

The pervious concrete, including some red, was supplied by IRMCA member Central Illinois Prairie Material out of Champaign and was placed by Stark Excavating of Bloomington in late 2010 and 2011. A school official told IRMCA that the pervious lot performed extremely well during the heavy rains in May and June. Garden Hills Elementary is located at 2001 Garden Hills Drive on the northwest side of Champaign.



***These pictures of the car lot in front of Miller Hyundai in Peoria gives ample evidence of why the owner is so pleased with his decision to overlay his entire operation with ready mixed concrete.***

## Asphalt



## Concrete



## Monticello Complex Goes Concrete

Kirby Hospital in Monticello is moving! Now! Kirby will serve as the major hub for a large development just off I-72 that will eventually be home to health, business and living units. The new Kirby Hospital measures 54,000 square feet and has a building budget of almost \$22,000,000. Kirby also reached an agreement with Carle-Monticello to build Carle's new Monticello physicians' offices adjacent to the new Kirby Medical Center at the new Medical Center Drive location.

Architect for the new hospital and the ALL-CONCRETE driveways and parking areas is Earl Swensson Associates, Inc. of Nashville, TN, and the general contractor is Robins & Morton of Birmingham, AL. The concrete contractor was Stark Excavating of Bloomington, and concrete was supplied by IRMCA member Central Illinois Prairie Material out of Champaign.

*Promotion Note: All original publicity (even those still on various web sites) shows the parking area for this new complex to be asphalt. Congratulations to the concrete contractor and producer for this concrete success story!*



The Romano Company, a major builder and developer in Decatur, has been in business for a long time – at least through two generations. Because of their experiences they have a good perception of what works well and what doesn't over the long term. They understand a property owner's concerns and are able to make informed recommendations. They also have determined what they want on their own developments.

Romano recently secured a former swim club property on the north side of Decatur, performed the requisite site work and built an office duplex which will house an insurance office and a doctor's office. When determining parking lot design, Romano President Tony Romano says, "There was no decision to be made – concrete." Romano referenced his many years in development and based the decision on maintenance issues. "We can place a quality concrete lot and basically not worry about it again."

Concrete was placed by Thoele Concrete Construction of Montrose and was supplied by IRMCA member Grohne Concrete of Decatur.

## Decatur Developer Chooses Concrete for Office Building



# IRMCA Legislative Report

By Jim Randolph



## **SB 1644**

80,000 pound access to all roads in Illinois has been signed by the Governor and becomes effective January 1, 2012. This bill clarifies numerous size and weight provisions of the Illinois Motor Vehicle Code. The Governor's signature came after nearly a year of work between industry, Illinois State Police, IDOT, and local law enforcement officials. Only posted bridges and roads posted for freeze thaw cycles, are allowed to limit the weight. Many law enforcement officials were struggling with the complexity of the original bill allowing 80,000#. SB1644 is meant to simplify the language so that enforcement will be consistent.

## **SB 1913**

This bill extends the uniform speed limit that passed 2 years ago to include state highways US 20, US 34, US 50, US 67, US24, US 45, US 51, US 136 and Illinois Routes 2, 6, 13, 92, 104, 255 and 336. The speed limit for cars and trucks will be the same. These are all outside the counties of Cook, DuPage, Kane, Lake, McHenry and Will, which will continue to have the 55/65 MPH split.

## **Workmen's Compensation Reform**

This language is complex and confusing. We are not getting all that we hoped for. I just read that in Peoria a Tazwell county worker was awarded over \$13 million for the loss of his leg at the job site. What a tragedy for a 19 year old to lose a leg, and what a costly precedent for the future if limits are not set.

## **IN THE PIPELINE**

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### **Workmen's Compensation**

Medical Fees have been targeted to be reduced by 30%. Rates are being reevaluated to ask Health Insurance companies for further rate deductions. In my opinion, that is not likely to happen. An alternate idea is being floated to instead reduce corporate tax rates.

### **EPA Air Permits**

The EPA air permit annual fee is likely to increase by \$34 to \$234 per year. The EPA has worked with industries in every sector to generate over \$6 million in additional fees to keep their bureau running. Industry had a lot of input on this and the EPA will likely accept the proposal.

### **EPA**

The Illinois Pollution Board has rule pending regarding demo debris dumping. This is not legislated but can become a "rule" as imposed by the EPA. We will continue to monitor and communicate with the industries more directly involved with the this board going forward.

### **Redistricting**

Most of the attention of our General Assembly is placed on the upcoming election. With the new boundaries for the districts many incumbents will be challenged. It will be an interesting Fall session and upcoming year.

*I welcome your calls, questions, or comments thru the IRMCA office.  
Please be involved!*

# Concrete Industry Summit



On July 21, the Portland Cement Association held a national Industry Summit in Rosemont to update recent data from studies being conducted at MIT's Concrete Sustainability Hub and to give the industry a look at PCA's concrete pavement advocacy efforts. In attendance were high level personnel from PCA (including all regional promotion group representatives), NRMCA, many ACPA Chapter executives and national officers and cement company and ready mix association representatives. Below are a few comments on the meeting and how it might affect IRMCA members:

**STRATEGY:** Instead of waiting on the housing and commercial markets, PCA is urging its members and industry allies to take advantage of MIT study results and PCA's Federal advocacy efforts (see below) in an effort to increase concrete's share of the paving market.

**MIT CONCRETE SUSTAINABILITY HUB:** MIT is approaching its current project in 2 phases. First they are working on a Life-Cycle Cost Analysis Model (LCCA) and next they will address sustainability. Their first published report was out August 11 (see article on page 26).

**FEDERAL ADVOCACY ON LCCA BY MERCURY LLC:** Mercury LLC is a Washington, DC, high-stakes public relations firm being employed by PCA to advocate concrete at the national level. Mercury conducted larger than usual polls, asking people nationwide if they prefer concrete or asphalt roads, if they prefer concrete or wood residences, if LCCA's should be required and if they would consider MIT findings reputable. The results were all very favorable to concrete, transparency (LCCA's) and to the veracity of an MIT study. Mercury reported that legislation has been introduced in both houses to require LCCA on all federally funded roads, and they discussed some of the ways they are amplifying the message (e.g., newspapers, social media). [Note: IRMCA can send a copy of the Mercury presentation upon request.]

**METRICS AND MEASUREMENT CRITERIA FOR PROMOTION AND ADVOCACY:** Ed Sullivan, et al., of PCA talked about concrete's current share of the paving market. They can be fairly accurate on the highway portion, which represents about 20% of the total paving market, but have no verifiable data about the rest, such as streets, local roads and parking lots. Some more of their thoughts: there is nothing we can do about the debt ceiling; oil prices are predicted to be \$140/bbl. by 2020; and new cokers – most coming on line in 2012 and 2013 – should reduce the availability of asphalt. Economically, 2012 is predicted to be poor; 2013 and 2014, slightly favorable; and 2015, good.

**CONCLUSIONS:** our industry leaders are aggressively targeting paving (e.g., highways, streets and local roads, county roads, parking lots) and will use the base MIT research to carefully craft promotional messages regarding concrete's superiority. They (we) hope that the prestige of MIT, the expertise of Mercury and energy put forth by our industry will increase our share of the paving market.

# Tell It Like It Is

By John Albinger

## Why Test?

Why do we or why should we test the concrete we produce? The most common answer is to see if what we ship meets specs for a job we have. That's obviously a good reason because the consequences of shipping a bad load can result in rejection or, much worse, at a later date, removal. The most common tests we run are slump and air, although many of us tend to estimate the slump and not really run the test. I realize that most of us can "eyeball" the slump within an inch or maybe even a half an inch, but believe me, you're always better off running the test. Confidence in your test results is always a big issue, especially when you're arguing with a contractor or inspector. But CingY... shouldn't be the only reason we test our concrete.

Tests also reflect the quality of the constituent materials and the accuracy and consistency of our batching operation. At a later date we'll talk more about those things, but at present all I'm going to ask of you is to walk through your plant and make sure everything looks like it's functioning properly. Periodically look at the aggregates you're using. You or your loader operator may not see exact gradations but you can see consistency or, more importantly, inconsistency. Aggregate consistency is important in every aspect of our concrete's performance.

Remember, test results are only as good as the sample you take and the way you run the test. Realize that if you don't know how to do it right you won't be able to recognize when someone else isn't doing it right, like an inept inspector who's rejecting one of your loads. So we'll assume you have a handle on the quality of the materials you use in your concrete and you know how to properly run tests. (I hope it's a good assumption.)

Tests tell us two things: how our concrete performs and how cost effective our mixes are. So let's test our concrete. The first thing we do is look at the concrete as it is discharged. If it's not the slump we want the driver adds water, a quick fix but maybe not the right fix. (A question you need to know the

answer to: why wasn't the slump right?) At the right slump how does the concrete move down the chute? This is a good indication of its placeability. How does the concrete look in the wheelbarrow?

Is it too stony or too sandy? Is it homogeneous? Take a trowel or float and run it across the concrete. Is it sticky? Does it feel good? If you don't like how the concrete looks or feels, chances are there's something wrong with the aggregate gradation, high or low air, too much or too little water, incorrect amount of admixture. You need to know.

If we're happy with the sample the first thing we do is stick a calibrated thermometer in the concrete, regardless of what time of year it is. Temperature relates to water demand, admixture dosage, setting time and finishability.

Next we correctly run a slump test. The slump of the concrete we produce and ship has to be such that the concrete that arrives on the job meets specs. If it doesn't, an adjustment in the mix may be necessary. If adding more water is your solution, be careful that you don't exceed the specified w/c. Once again the quick fix may end up getting you in trouble later. The slump tells us the effectiveness of the amount water and admixture used, the placeability and, to some extent, finishability, and can often relate to strength.

Ideally you have a scale so that you can weigh the concrete, get the unit weight (pounds per cubic foot) and determine the yield (cubic feet per cubic yard). The unit weight and yield can tell us if the air is high or low and if we're giving away material or shorting the customer. (Nice to know when the contractor says, "I'm short.") If you don't take a unit

*"Tests tell us two things: how our concrete performs and how cost effective our mixes are."*

weight the air test may also tell you how your mix yields. In as much as proper air contents help insure durability and prevent scaling it behooves you to run periodic tests. When you're discussing responsibility for a scaled driveway, once again confidence in what you shipped is a big issue. The air content also affects strength and finishability.

The last and most controversial test we're going to talk about is strength. Since most of us don't have the capability of breaking our own cylinders we'll just talk about making cylinders. Often considered the most important test, it is the easiest to "screw up". Proper casting, curing and breaking are critical and leave little room for error. Of the three, handling and curing immediately after casting is probably the biggest cause for low breaks. Only standard cured cylinders can be used for acceptance or rejection. Cylinders not standard

cured tell us nothing. Standard cured means that immediately after casting, the cylinders must be moved to an environment preventing moisture loss and 60° - 80° for a period not to exceed 48 hours. Standard cured cylinder breaks tell us the strength and consistency of our concrete. That information can help optimize the performance and cost of our mix designs. Standard cured cylinders tell the contractor if the concrete you provided meets specifications. They do not reflect the strength of the concrete in place.

Keep a record of every test you run and of every cylinder break you receive. You can use cylinder breaks to statistically back up mixes you may want to submit for use on a specific job, and all other test results can help to prove you produce a quality product when a problem of any kind arises.

# The World's TALLEST Building

Official launch ceremony was in January 2010.

Made with high quality, 100-year design life ternary blend concrete.

Designed to withstand extraordinary weight and high temperatures.

Concrete mat is over 12 feet thick.

Concrete and steel foundation is made of 192 piles buried more than 164 feet deep.

At 2716.5 feet it is the world's tallest man-made structure.

Holds record for highest vertical concrete pumping (1988 feet) for any construction project.

Required over 58,900 cu yd of concrete.

Construction took 22 million work-hours.

During the hot summer the contractors added ice to the concrete mixture and then poured at night, allowing the concrete mixtures to cure evenly with minimal cracking.

Excavation work began in January 2004.



**Burj Khalifa**  
**Dubai, UAE**  
[www.burjkhalifa.ae](http://www.burjkhalifa.ae)

*Photo courtesy of Emaar Properties.*



## Glenview Constructs One of Illinois' Larger Pervious Lots

The great environmental advantage of pervious concrete is that stormwater runoff is filtered through it and into the ground, and that is one of the reasons pervious concrete was chosen for a parking lot near The Glen of North Glenview Metra Station. The lot, located at Compass Road and Lehigh Avenue in Glenview, was placed on August 29 and is one of the bigger pervious lots in Illinois.

Glenview's 16-member Storm Water Management Task Force recommended that the village increase its use of permeable surfaces as a way to both reduce flooding and improve water quality. EPA's Natural Resources Commissioner Judy Beck also encouraged the use of pervious concrete for this project.

80% of the \$1.66 million project was funded by a federal Congestion, Mitigation and Air Quality (CMAQ) grant, and IDOT used the project to help establish Illinois standards for this type of infrastructure.

IRMCA member Meyer Material supplied the material to general contractor Plote Construction.

