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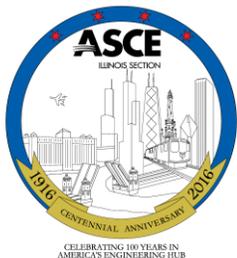
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ASCE Illinois Section

News

Vol. 57, No.2
Summer 2016

The Rise and Fall and Rise of Bicycling

By Frank Zurek

According to an article in the New York Times, “the bicycle has made a genuine come-back. New York City and its immediate suburbs have not as yet felt this, as facilities for the use of bicycles are so limited. Yet manufacturers who tried to make this year a “million bicycles year” came only a little short of selling that number. Riders seem to have conquered their fear of the automobile sufficiently to venture out once more on the many miles of improved roads all over the country, and they find it just as exhilarating and healthy as it was when the bike craze was at its height.”ⁱ The bicycle as a form of transportation has ebbed and flowed over the last one hundred years. This citation is from an

The early road system was advocated by cycling organizations.

article in the New York Times, published in 1916, the year the Illinois section of ASCE was founded. The statement above almost reads as an article from 2016 as cycling is again



Figure 1 - Richard J. Daley during the opening of Chicago's first bike lane. Photo by Chester R. Kropidlowski, P.E., Creative Commons license By SA 2.5

seeing another resurgence in ridership and infrastructure improvements.

In 1900, only 1% of the US owned a car.ⁱⁱ The early road system was not advocated by motorists, but instead pushed by cycling organizations for nearly 30 years before the first automobile organization started advocating.ⁱⁱⁱ “Bicycle groups, led by the League of American Wheelmen, and manufacturers... worked at the federal, state, and local level to secure road (continued on page 8)

President's Notes

Thera Baldauf, P.E.



In the Spring, I have counted 136 different kinds of weather inside of 24 hours – Mark Twain

I felt this saying was very appropriate with the recent weather we have been experiencing these past few months and all that it brings; the good with warmer days, grilling, and socializing, and the bad with severe weather, potholes, and traffic delays.

This time of year also reminds me of the major legislative events both ASCE National and the Illinois Section host annually. On March 17-18 several Illinois Section members participated in the ASCE National Fly-In. This year's message to legislators was to encourage the approval of appropriations to fund the Water Resources Development Act (WRDA), water infrastructure funding and the Federal Aviation Administration Reauthorization (FAA). More than 200 ASCE members from 49 states participated in this event. In particular, I would like to thank Region 3 Governor Darren Olson, Past-President Mike MacKinnon, Past-President Pat Lach and President-Elect Jennifer Gora for



representing the Illinois Section and our profession at this very important event.

Once again, the Illinois Section hosted its Annual Springfield Drive Down on May 3rd. Though turnout was smaller than years past, this event was a success as it provided another opportunity for Illinois Section members to remind our legislators the need and importance to continue funding infrastructure projects. In conjunction with ACEC and TFIC, there were over 150 civil engineers in Springfield this month to let our voices be heard. As a result of our efforts, the state senate passed the "Lockbox" legislation that will bring transportation funding as a referendum item in the fall election. It is crucial that we all engage our legislators as our input can impact how they perceive the importance of maintaining our infrastructure systems. The Illinois Section will continue its efforts in engaging with other professional organizations who share our concerns as well as providing the membership with more outreach activities.

Being engaged in these legislative activities allows the Illinois Section to be part of a much bigger dialogue and help mitigate outside influences that may adversely impact our profession.

The State of Illinois is currently delinquent in paying membership dues to the National Council of Examiners for Engineering and (continued on page 13)

ASCE Illinois Section News

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E-Mailed to all ASCE-IS dues-paying members
American Society of Civil Engineers Illinois
Section - Region 3

**Communications Chair/
Newsletter Editor -
Megan McDonald**

Transystems Corporation
222 South Riverside Plaza, Suite 610
Chicago, IL 60606
312-669-5824
mamcdonald@transystems.com

**Director of Advertising -
Brian Pawula**

847-922-6125
brianp@thomas-engineering.com

Pres. Thera Baldauf(312) 831-3043
Pres.-Elect Jennifer Gora (312) 930-9119
Sec. John Lazzara (773) 380-7938
Treas. John Green (312) 894-5369

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Rain, Rain...Go Away

By Steven M. Shanholtzer, P.E.

Don't forget your umbrella!! It's no secret that this Spring has generated heavy rainfall totals. Over the last month (April 18th to May 18th), the precipitation has been up 15% on average. These numbers don't lie, just take a look at the information from the USGS Real-Time Precipitation Data.

Geographical Area	2016 Average Rainfall Total in May	Historical Average Rainfall Total in May
Will County	5.0 Inches	4.4 Inches
Cook County	5.2 Inches	3.7 Inches
DuPage County	6.1 Inches	4.1 Inches
Lake County	4.1 Inches	4.0 Inches
McHenry County	3.5 Inches	4.6 Inches
Kane County	4.7 Inches	4.3 Inches

That's a lot of rain!! So what happens to all that water, and where does it go? It is the job of a civil engineer to carefully evaluate, design, and implement a detailed drainage plan for each development within a community. That's right, civil engineers help keep our roads, basements, and parking lots dry. They also take on the responsibility of protecting the world's most precious natural resource. Since only 1% of the world's water supply is available and usable for drinking, a civil engineer's job is vital to our overall wellbeing.

Let's take a closer look at how this is accomplished locally, in the Chicagoland area. For all practical purposes, Chicagoland is comprised of the five (5) collar counties (DuPage, Kane, Lake, McHenry, and Will) and the Metropolitan Water Reclamation District, which regulates stormwater discharges in Cook

County. Each county has adopted a different set of rules to regulate stormwater management. In addition to environmental feature-regulations (wetland, floodplain, etc...), each countywide stormwater ordinance is generally comprised of two (2) parts; water quantity control and water quality control. Both are essential, and each contribute as a basic building block to the overall stormwater management plan.

Stormwater quantity regulations help attenuate peak flow rates into downstream channels, storm sewers, and streams. Stormwater management facilities are designed to capture and store onsite runoff to help maintain the existing drainage patterns of a site during a predevelopment condition. Basically, runoff is rainwater that can no longer penetrate the natural ground surface once it has become saturated. Land development activities produce increased impervious area (pavement, roofs, etc..) that hinder the natural infiltration qualities associated with vegetated surfaces. Therefore, detention volume is necessary to avoid overloading the downstream collection systems.

Stormwater quality requirements are generally new to northeastern Illinois. The design standards are established based on treatment of lower intensity storm events. In other words, the 'first flush' of stormwater runoff is captured and treated to improve water quality within local streams, rivers, and

lakes. When precipitation comes into contact with an impervious surface, it often collects dirt, oils, and other debris. This is particularly true during the early portion of a rainfall event. Therefore, it is extremely important for these inhibitors to be properly filtered and treated to avoid negative impacts to the downstream ecology of a body of water. Water quality standards help promote groundwater infiltration, and treat the "first flush" of precipitation. Each local ordinance differs in quantifying runoff volumes requiring treatment. However, the overall objective remains consistent. An area of land shall be set aside to function similar to the undeveloped drainage characteristics of the property. Defining the size, location and function of these areas, along with areas for stormwater detention should be a critical early step in the land development process.

Needless to say, a stormwater engineer should be engaged early and often during any type of land planning activities. The water quality aspect of land development should not be overlooked, because these regulations are often supplemental to the overall detention requirements (i.e. water quantity). When the development process is thoroughly examined with a civil engineer, a site plan may be generated that benefits the owner, community, and local aquatic habitat. For example, the (continued on page 10)

Supercharging Your Communication Skills

By Patrick J. Lydon, P.E., Megan McDonald, P.E., LEED AP, Dhooli Raj, P.E. and Andrew Walton, P.E.

There are many publicized benefits to being a member of ASCE which include networking opportunities, professional development hours (five (5) free every year when you renew), and most recently, the IL Section's 100 Year Anniversary events this year. Now the benefits are expanding to address the management skills required to be a successful engineer.

Supercharge Your Career is a new program, under development by ASCE, aimed at younger members to provide training on practical leadership skills and management concepts to those with under 10 years of experience. Once the final rollout is complete, it will be comprised of five modules – Career Development, Leadership, Project Management, Communication, and Change & Innovation.

Last month, the Illinois and Seattle Sections of the Younger Member Group (YMG) performed beta testing in their respective regions on the Communications Module. Hosted by Milhouse Engineering & Construction, Inc. here in Chicago, a group of 15 younger members went through the module with volunteer facilitators from the IL Section Board. Over three 2-hour sessions, the facilitators presented the material and solicited feedback on the content and topics covered to provide

recommendations back to ASCE National.

One consistent theme from this beta module is that communication and awareness is critical to share any message clearly and effectively.

One consistent theme from this beta module is that communication and awareness is critical to share any message clearly and effectively.

Session 1 covered the fundamentals of communication, beginning with communication styles. The participants took a short test, based upon the Social Styles developed by Dr. David W.

Merrill, to define their dominant individual communication style as one of the following: amicable, analytical, driver, or expressive. The discussion during this first session allowed the group to understand the differences between the individual styles and the most effective ways to communicate with different communication styles from one's own. This session also covered non-verbal communication styles and listening techniques.

Session 2 focused on how to convey information. This is a familiar topic for engineers as many of us are responsible for conveying information and knowledge to peers, managers, and the general public through presentations, reports, (continued on page 10)



Figure 1: Facilitators and Participants Going Through the Module

Region 3 Updates

By George Ghareeb, P.E., Region 3 Director

On August 12 and 13, Region 3 will host the 8th annual Region 3 Assembly in Chicago - a save the date notice will be sent out shortly. Thank you for all that have attended the assembly in the past and for those that are going to attend this year. The lineup for this year will include discussion on the three revised strategic initiatives: Sustainability and Infrastructure, The Grand Challenge, and Raise the Bar (which includes attracting youth to Civil Engineering careers).

Congratulations to both the Illinois Section and the Michigan Section for celebrating their Centennial Anniversaries. We are looking forward to a presentation from both sections during the assembly to showcase their history. The Illinois Section will be organizing a boat tour on the Chicago River on the evening of Friday August 12th as one of a number of activities that they have planned this year for their Centennial Celebration. For anyone who has not attended the tour it is one of the best tours in the country that showcases the changing architecture of Chicago plus it comes with a big discount (thanks to the Illinois Section). I strongly encourage everyone's participation-members and their families.

A lot has taken place in the recent couple of ASCE National Board meetings. The Board has been active in looking deep at the strategic initiatives and whether to decouple some of these initiatives.

During the latest Board meeting, the board placed a stop on the Raise the Bar Initiative and has formed a new committee to provide a new set of eyes on the things that have worked in the past and things that have not worked on this initiative. The new committee should have a report ready by the October Board meeting.

The Board has also established a new committee to review the current regional boundaries and recommended whether to keep the current structure or a new structure would be recommended for the Board's approval. Along with the restructuring, the allotment of funds will drop from the current formula (based on the number of members) to a new formula that allocates a fixed allotment that is the same for all the regions, and travel expenses would be covered by the Board. As your Board representative, I have opposed this new formula since it will affect our region assembly in the future. I am a strong believer that the organization should do whatever makes the members and their respective sections and branches stronger.

On other Region 3 news, all three regional student conferences were completed: the Ohio Valley, Great Lakes, and North Central. Those cover all of the schools within Region 3. Most of the Ohio Sections are in transition to installing their new officers. The Ohio Council is working to update their state Report Card with an

anticipated draft release date in February 2017.

I am happy to say that The Northwest Michigan Branch was re-activated in September of 2015, with James A Morrison as President, Lucas Porath as Treasurer, Nils Lindwall as Secretary, Jason Bodell as Communications chairman, and Jamie Johnson, Jason Fate, and Brian Lindfors as Vice Presidents. Several meetings have taken place in recent months and they are planning for a September 2016 seminar highlighting major Northern Michigan Projects. Thanks to Governor Rhett Gronevelt from Michigan and Jim Morrison for stepping in along with the other folks in the branch. Wish them the best of luck.

Look forward to seeing your delegates in Chicago on August 12th and 13th for the Region 3 Assembly.

Mr. Ghareeb serves as a Vice President for TERRA Engineering, Ltd. (TERRA) where he is responsible for administration, operations and business development. Prior to joining TERRA, Mr. Ghareeb started his career as the Bridge Management Engineer for the Illinois Department of Transportation (IDOT). He later served as a Project Manager for Dar Group, an international design firm where he was instrumental in the completion of a 400 million dollar airport project. His international experience exposed him to engineering practices in countries, including England, Italy, Egypt, Saudi Arabia, Dubai, Qatar and Lebanon. Mr. Ghareeb is a Director/Chair for ASCE Region 3.

It's Time to Nominate Your Peers, Projects, and Firms for the 2016 ISASCE Awards

By Megan McDonald, P.E., LEED AP

With the summer fast approaching, it is the time of year when the ASCE Illinois Section solicits nominations for individuals, exceptional projects, and employers for their contributions to civil engineering and our Society. The Illinois Section needs your help in identifying and recognizing qualified individuals, projects, firms, and agencies. The award winners will be acknowledged during our 100th Anniversary Awards Gala taking place October 13, 2016 at the Intercontinental Hotel.

HOW TO NOMINATE?

Nomination forms and additional information on award requirements can be found on our website www.isasce.org/scholarships-rewards. For nominations of individuals, a complete application consists of a nomination form, a letter of support, resume, and letters of recommendation. Project nomination packets must consist of the nomination form and letter, a narrative, and pictures highlighting the unique attributes of the project or construction aspects. A statement of support from the owner or client is also

needed for project nomination packets.

Nominations for all 2015 awards are due by **August 5, 2016**. Please submit the original nomination(s) to Megan McDonald at 222 S Riverside Plaza, Suite 610, Chicago, IL 60606 and a pdf of the nomination packet electronically to mamcdonald@transystems.com. Feel free to call Ms. McDonald (312.669.5824) with any questions or comments.

WHAT ARE THE CATEGORIES?

ISASCE has eleven (11) awards available for individuals, firms, and projects. Below is a brief description of each available award, additional information and details can be found on ISASCE's website.

Outstanding Civil Engineering Achievement Award

The Outstanding Civil Engineering Achievement Award recognizes outstanding projects that contribute to civil engineering progress and to society. The project must have been completed by the end of 2015 to be eligible. Three project size categories are available – Projects having a Cost of \$10M or less, Projects with a

cost over \$10M but less than \$25M, or Projects with a cost of \$25M or more. **Projects may be nominated for the National OCEA Award.**

Sustainability in Civil Engineering Achievement Award

The Sustainable Project of the Year award recognizes creativity in the form of innovative sustainability. Projects may be any that demonstrate innovation in sustainability and that were constructed by the end of 2015 and demonstrate adherence to the principles of economic, social, and environmental sustainability.

Civil Engineer of the Year

The Civil Engineer of the Year award recognizes an outstanding professional engineer, who has made contributions to society through extraordinary professional conduct in a specific instance or having an established reputation for professional service.

Young Civil Engineer of the Year

This award will be presented to a civil engineer with either EIT or PE registration who is employed in the private sector and is under (continued on page 12)



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The Rise and Fall and Rise of Bicycling

(continued from page 1)

improvement legislation.”^{iv} The Federal Highway Administration got its start during the early 1900’s as a result of this advocacy. In 1916, the Federal Aid Road Act was authorized with a funding formula similar to today, where money was apportioned to state highway agencies who would design, construct and maintain the roadway. States were required to create their own highway offices and the federal government opened their first ten district offices that same year. At this point the US was experiencing a dramatic rise in car ownership; by 1934-36, 44% of the country owned a car.^{v,vi} The post-war period saw another sharp increase, closer to levels that we see today with 100 cars on the road for every 100 people.^{vii} The engineering community has evolved and kept pace with this rise; automobiles have greatly influenced US road and community design as

Cycling led early developments in transportation engineering.

demonstrated by the advent of the interstate highway system, the Federal-Aid Highway Act in 1956 and the spread and explosive growth of the suburban housing development.^{viii} So while cycling led early developments in transportation engineering, cars eventually took the lead for most of the 20th century.

Locally, Chicago was known as the bicycle manufacturing capital

of the world in the late 19th and early 20th centuries. Additionally, the region had a greater number of paved roads compared to the rest of the country, which contributed to cycling’s popularity here. Following the rise of the automobile, the region and the country saw many shifts in the popularity of cycling and the role it played in society. The first inkling of the modern bicycle movement began locally in 1963, when Mayor Richard J. Daley designated the lake front trail as a

Cycling has returned as a respected mode of transportation, one that is planned for and accommodated in all facets of roadway design.

bicycle path.^{ix} In the 1970’s, Daley opened the city’s first on-street bicycle lane, a simple two-stripe design. Mayor Richard M. Daley continued the trend with on-street facilities throughout the city and associated cycling infrastructure such as bike racks, bikes on buses, and the creation of the Mayor’s Bicycling Advisory Council in 1991, which still meets four times a year. Chicago’s current mayor, Rahm Emanuel, brought in an innovative DOT commissioner who further modernized the city’s cycling infrastructure and led to several high profile projects downtown and in the surrounding neighborhoods. Cycling has returned as a respected mode of transportation, one that is planned

for and accommodated in all facets of roadway design.

The latest designs of on-street bike infrastructure includes separated bike lanes (SBL), also known as cycle tracks. They represent a new approach to road design, an approach that redefines and reallocates road space for bicyclists. An SBL is an on-road bikeway physically separated from motorist and pedestrian travel by a barrier or elevation change. Associated intersection markings, often with colored pavement, can be used to call attention to through bicyclists and provide guidance for both bicyclists and motorists. SBLs reduce bicycle crash rates, provide a comfortable space for bicyclists and typically lead to dramatic increases in ridership after installation. One of Chicago’s first SBLs was installed on Dearborn Street in the Loop in 2012. It includes green pavement at conflict points, bike-specific traffic signals to accommodate left turning motorists from Dearborn, and bollards and parked cars as the barrier. Although a travel lane (continued on page 9)



Figure 2- Dearborn Street separated bike lane at Madison Street. Photo by Matt Villanueva, Primera Engineers.

The Rise and Fall and Rise of Bicycling

(continued from page 8)

was removed to fit in the two-way SBL, motorist travel times in the corridor were not adversely affected because Dearborn had excess capacity. Bike volumes increased on Dearborn by 171% after installation of the SBL partly due to bicyclists shifting routes, and partly due to the facility providing a comfortable and safe area for risk-adverse bicyclists that normally wouldn't ride amongst heavy downtown traffic.^x

The rise of SBLs is being recognized by the federal government. Aspects such as green pavement and bicycle signal faces have interim approval by the MUTCD. Bicycle boxes and two-stage turn boxes (features of intersection controls for certain SBL designs) are granted experimental status. The FHWA even released their own Separated Bike Lane Planning and Design Guide in 2015.^{xi}

Suburban and rural areas have seen similar resurgences in cycling over the past 50 years. Much of the focus has been in off-street shared use paths and trails. The Illinois Prairie Path (IPP), a network of 61 miles of shared use trails was conceived in 1963 and

built, expanded and improved over the subsequent decades.^{xii} Much of the right-of-way was existing railroad converted to trail use, a trend that continues to this day with the widely successful rails to trail program. Remember the League of American Wheelman, the advocacy group that led to paved roads around the country in the late 19th and early 20th centuries? They have continued to this day in various forms. After a brief hiatus in the mid-20th century, the League was revived in 1965 and eventually renamed to the current League of American Bicyclists (LAB) in 1994. One of their most popular outreach tools is their Bicycle Friendly Community program that



Figure 3 - Photo by John Greenfield. <https://flic.kr/p/o23VXW>. Creative Commons license BY 4.0.

recognizes communities that support cycling. Batavia, a local

community within the ASCE Illinois Section, was recently awarded bronze status by LAB in 2013, partly due to the completion of the North River Street woonerf.^{xiii} A woonerf is a shared street where motorist speeds are reduced and traditional barriers between the pedestrian and driver realm are removed to encourage mixing and better eye contact between users. In Batavia, motorist speeds were reduced to 20mph and priority was given to bicyclists and pedestrians. Easy connections to the Fox River Trail were provided with a bike ramp, bike racks, improved lighting and planters to create a more enjoyable experience for all road users. The Batavia project leveled the playing field between bicyclists, pedestrians and motorists, creating an environment similar to when the ASCE IL section was founded, where motorists did not rule the road and transportation was about moving people and not just cars.

Frank Zurek is a complete streets engineer with [Primera Engineers](#) specializing in bicycle and pedestrian research and designs.

ⁱ<http://query.nytimes.com/mem/archive-free/pdf?res=9A00E4D9113CE733A25757C2A9649D946796D6CF>

ⁱⁱ<http://www.theatlantic.com/business/archive/2012/04/how-america-spends-money-100-years-in-the-life-of-the-family-budget/255475/>

ⁱⁱⁱ<http://www.theguardian.com/environment/bike-blog/2011/aug/15/cyclists-paved-way-for-roads>

^{iv}<https://www.fhwa.dot.gov/publications/publicroads/93fall/p93au1.cfm>

^v<http://oldurbanist.blogspot.com/2013/02/was-rise-of-car-ownership-responsible.html>

^{vi}<http://www.bls.gov/opub/uscs/reflectionns.pdf>

^{vii}<http://www.theglobeandmail.com/newsworld/us-car-ownership-shifts-into-reverse/article1206835/>

^{viii}<https://www.fhwa.dot.gov/interstate/history.cfm>

^{ix}<http://www.wttw.com/main.taf?p=74.5.1.1>

^x http://bikeportland.org/wp-content/uploads/2014/06/NITC-RR-583_ProtectedLanes_FinalReportb.pdf.

^{xi} http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/page00.cfm

^{xii} <http://www.ipp.org/history/>

^{xiii} <http://www.bikingbatavia.org/>

Rain, Rain....Go Away

(continued from page 3)

preservation of existing open space will help protect the environment, reduce detention requirements, and minimize construction excavation. This can be a win-win for everyone!

In other cases, it is not practical for a significant portion of a property to remain undisturbed. Therefore, environmental amenities may be enhanced with implementation of Best Management Practices (BMP). The Will County Stormwater Management Ordinance defines BMP's as, "A measure used to control the adverse stormwater-related effects of development." This may be achieved by a manufactured device or through implementation of naturalized vegetation. Deep rooted plants encourage infiltration and allow pollutant removal. Although this is a relatively new practice, some stormwater ordinances are now specifying measurable formulas to delineate land area that shall be utilized for BMP's. In most instances, these metrics are established per the implementation of new impervious area. For example, a comparison of the Countywide Stormwater & Flood Plain Ordinance for DuPage County and the Metropolitan Water Reclamation District of Greater

Chicagoland Watershed Management Ordinance (W.M.O) is provided below:

Stormwater Ordinance	Volume Control Requirements per Total Impervious
Cook County	1.00 Inches
DuPage County	1.25 Inches

In relative terms, a new project may create ten (10) acres of new impervious area. Although some stormwater ordinances offer relief based upon the existing characteristics of the site, let's use ten (10) acres as a baseline. With the requirements listed above, the Cook County and DuPage County Ordinances would require 0.83 Ac-Ft and 1.04 Ac-Ft, respectively. This metric may be achieved in many different fashions, but the concept must allow groundwater infiltration and recharge. Some typical practices include filter strips, infiltration trenches, and additional excavation below the gravity outlet of a detention facility. Regardless of the approach, it is important that a detailed landscape and maintenance plan to be complimentary to the final engineering design. With sustainability as the overall goal, it is important for the system to operate properly for many years to come.

Even with the evolution of local codes and ordinances, stormwater management is an area for continued development. We should encourage new research to build upon our current knowledge and understanding of the overall environment. The freshwater supply on Earth is a precious resource that is vital to our existence. Similarly, the actions of Mother Nature are difficult to predict, and we continue to see property damage due to flooding year in and year out. Civil engineers have the unique ability to create a better tomorrow, by designing and implementing the practices of today.

**Steven M. Shanholtzer P.E.,
Manhard Consulting, Ltd.**

Steven is a Project Manager for Manhard Consulting with over 12 years of experience in land development. He has an extensive background in the stormwater management aspects of land development and the nuances for development within each of the collar counties. Steven is a graduate of Bradley University in Peoria, Illinois, and he currently serves as an officer for the American Society of Civil Engineers Urban Planning and Development Group. He is a registered Professional Engineer in the State of Illinois.

Supercharging Your Communication Skills

(continued from page 4)

specifications and drawings. We discussed the value of templates within our workplace to increase efficiency and to create a

company brand that provides a reliable and accurate product to our clients. This module included multiple exercises to engage the

participants in the various ways of conveying information to diverse audiences, and provided a lesson (continued on page 11)

Supercharging Your Communication Skills

(continued from page 10)

on impromptu speaking. Discussing the various pitfalls of oral presentations included sharing the following reactions of; fidgeting, the use of filler words and non-verbal body language not aligned to the verbal message. The discussion of these topics helped tie back to the themes discussed in Session 1.

Effective Communication is necessary to enhance teamwork, decision-making, and problem solving...

Session 3 concluded the module with a discussion on workplace interaction that took the previous sessions and applied the communication styles to different scenarios that are common for young engineers within their office environments. A major component to this discussion was the use of email (when is it appropriate, when should you refrain), project interactions within the office, and then external communication requiring interfacing with clients and the public.

The YMG members learned how their individual communication styles impact relationships within the workplace, home, and overall social interactions. Effective communication is necessary to enhance teamwork, decision-making, and problem solving – and is imperative when expressing negative or difficult messages.



Figure 4: Participating in one of the many exercises as part of the module

That's when communication is the at its most difficult and the more you know, the better you can react and move forward to finding and acting on a solution.

... a great starting point for our young engineers to learn the non-technical skills required to be future leaders within our industry.

The Communications module is an ASCE program that has the potential to be a great starting point for our young engineers to learn the non-technical skills required to be future leaders within our industry.

Patrick J. Lydon, P.E., Michels Corporation

Mr. Lydon has 17 years of experience in deep foundations and below grade construction installations and the management of complex projects. He volunteers for ASCE activities and encourages STEM education

opportunities. He is a Director of ASCE to 2017.

Megan McDonald, P.E., LEED AP, TranSystems

Ms. McDonald is a Project Engineer specializing in transportation/highway projects. She serves as a Director of ASCE to 2016 and the Communications Chair & Newsletter Editor. She encourages you to follow ASCE IL Section on twitter (@ISASCE) and on Facebook.

Dhooli Raj, P.E., Collins Engineers, Inc.

Ms. Raj has 19 years of experience in consulting, contracting, peer review and management in the geotechnical industry. She is a strong advocate for volunteer activities that encourage math and science education for children and is a Director of ASCE to 2016.

Andrew Walton, P.E., Parsons

Mr. Walton is a Project Engineer with Parsons Transportation Group, Inc. He has worked on numerous design projects for the Illinois Tollway, IDOT, and various counties and municipalities. Andrew received his BS in Civil and Environmental Engineering from the University of Dayton, is a registered Professional Engineer in the State of Illinois, and an NCEES Record Number holder.

It's Time to Nominate Your Peers, Projects, and Firms for the 2016 ISASCE Awards

(continued from page 6)

35 years old as of February 1, 2016. This candidate will be evaluated on having gained significant professional achievement through advancement of the profession, evidence of technical competence, high character and integrity, and contribution to public service.

Government Civil Engineer of the Year

This award will be presented to a distinguished registered professional civil engineer employed in public service with evidence of sustained outstanding civil engineering performance in the public sector, showing evidence of high character and professional integrity.

Young Government Civil Engineer of the Year

As above, this award is presented to a civil engineer with either EIT or PE registration who is employed full-time in the public sector and is under 35 years old as of February 1, 2016. This person has shown excellent performance and demonstrated leadership potential in the public sector, evidence of high character, and professional integrity.

Citizen Engineer of the Year

This award is to be presented to a member who has made volunteer efforts that better our world in such areas as local or national legislation, education at all levels, non-profit volunteer organizations, community activities, etc.

Public Involvement Award

Presentation of this award will go to an IL Section member or group, which has made volunteer efforts that better our world in such areas as local/national legislation, education at all levels, non-profit volunteer organizations, and community activities.

Public Sector Employer Recognition Award

This award will be presented to a public sector employer who encourages their engineers to actively participate in ASCE. Special recognition will go to those organizations who exhibit exemplary support as evidenced by: providing a model for involvement through agency-wide participation; allowing engineers (continued on page 13)



The North Branch Dam completed in March 1910 is passing its first flood two months later. This and much more is described in Dick Lanyon's new book *Draining Chicago: The Early City and the North Area*. Chesbrough's sewer plan; Chicago Department of Public Works sewer system; District improvement of the North Branch and construction of the North Shore Channel; and transforming the watershed into the sewershed of the O'Brien Water Reclamation Plant. 420 pages. 183 historic photos. Published April 2016. Available from Amazon.com, Lakeclaremont.com and by request at Chicagoland booksellers by calling 312-226-8400.

It's Time to Nominate Your Peers, Projects, and Firms for the 2016 ISASCE Awards

(continued from page 12)

time off to attend ASCE meetings/seminars/events; supporting and encouraging technical and professional growth, encouraging engineers to prepare articles for publication in ASCE professional and technical journals; and assisting in the payment of society dues.

Private Sector Employer Recognition Award

This award will be presented to a private sector employer that encourages their engineers to actively participate in ASCE. Special recognition will go to those organizations who exhibit exemplary support as evidenced by: providing a model for involvement company-wide;

participation in local, regional, and/or national ASCE activities; allowing engineers time off to attend ASCE meetings/seminars/events; supporting and encouraging technical and professional growth; encouraging participation of younger members; and assisting in the payment of society dues.

ASCE Excellence in Journalism Award

This award was founded in 1994 for the ASCE National Awards. This award is given annually to a reporter or reporters whose news coverage enhances public understanding of civil engineering issues and the impact of civil engineers in this state or nation.

Only reports from general (non-trade) print publications are eligible. News stories must be published in English, in Illinois, and between May 1, 2015 and April 30, 2016.

For additional information and more in depth award criteria, please go to ISASCE's website – www.isasce.org/scholarships-rewards.

Megan McDonald, P.E., LEED AP, TranSystems

Ms. McDonald is a Project Engineer specializing in transportation/highway projects. She serves as a Director of ASCE to 2016 and the Communications Chair & Newsletter Editor. She encourages you to follow ASCE IL Section on twitter (@ISASCE) and on Facebook.

President's Notes

(continued from page 2)

Surveying (NCEES). As a result of this non-payment, NCEES has not released the results of the professional exams to the Illinois Department of Financial and Professional Regulation (IDFPR). ASCE Illinois Section Board Members have been collaborating with other professional engineering organizations and with officials at the IDFPR to help encourage an expedient resolution. Further updates will be provided to the Section membership in the coming months.

It's hard to believe that we are more than halfway through our Centennial year!!

The Illinois Section was recently honored by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) with a special Centennial proclamation presented to the Section on May 5th. A copy of the proclamation has been uploaded to the Illinois Section Centennial Webpage.

The Illinois Section has several Centennial events and activities planned this summer. Please come

join your fellow ASCE Members in watching the Schaumburg Boomers take on the River City Rascals this coming June 3rd. On Friday August 12th, the Illinois Section will be hosting its Centennial Civil Engineering Boat Tour. This three hour tour will be along the Chicago River and will feature a number of guest moderators. Be on the lookout for more information within this newsletter and future flyers with registration information.

Still haven't gotten your Illinois Section Centennial Anniversary (continued on page 14)

President's Notes

(continued from page 13)

lapel pin? Free anniversary pins are available to all Section Members at all Section sponsored Centennial events. Grab yours soon!

Interested in becoming a Centennial Sponsor? With a one-time donation of \$3,000 you receive top billings at all Illinois

Section Centennial events. As a Centennial Sponsor, your company name will be displayed throughout the 2016 year on the Illinois Section Centennial Webpage at <http://www.isasce.org/centennialanniversary/>. If you are interested in becoming a Centennial

Sponsor, please go to <https://www.123signup.com/registr?id=pnhvq>. Please feel free to reach out to me with any questions regarding the Centennial Sponsorship.

Looking forward to seeing you all at one of our Section's upcoming summer events!



Geosyntec Consultants, Inc. is a leader in bringing innovative solutions to our clients most challenging problems. If you're looking for an exciting place to work, a place with challenging and rewarding projects, and a place that has been nationally recognized for its employees' quality of life, technical expertise, and business success, then Geosyntec may be the place for you.

We are currently looking to fill the following positions in our Chicago and Oak Brook Illinois offices and St. Louis, Missouri office.

- Senior Water Resources Engineer/Project Manager in our Chicago, Oak Brook Illinois offices and St. Louis Missouri office (Job ID 40279 Oak Brook or Chicago, IL; Job ID 40281 St. Louis, MO)

Please visit the career page of our web site (www.geosyntec.com) to view descriptions of these positions and apply online.



ONLY \$20 / PERSON
(INCLUDES DINNER & TICKET)

ASCE Family Baseball Outing

June 3, 2016

5:30pm Dinner

6:30pm Game

Fireworks After the Game

Bring the family and join ASCE watch the Schaumburg Boomers take on the River City Rascals. Food and beverages will be available beginning at 5:30pm (food ends at 7:00pm). You may sit in the air conditioned Schaumburg Club or watch the game outside along the first base line.

Dinner and soft drinks are included with your ticket.

Address

1999 South Springinguth Road
Schaumburg, IL 60193

Dinner Includes:

- Grilled Chicken Breast
- Grilled Hamburgers
- All-Beef Hot Dogs
- Bratwurst
- Chips Potato Salad
- Ice Cream
- Soft Drinks & Water
- Alcoholic Drinks Are Provided at a Cash Bar

To register you and your family, please sign up at [\[123 SIGNUP LINK\]](#).

Contact Mike MacKinnon for sponsorship opportunities at mike@banburycre.com



June 2016

In an effort to inform Illinois Section members of the discussions at the monthly Board meetings, the Section Secretary contributes this quarterly article to the newsletter. Any questions or comments on the Board activities are welcome by contacting John Lazzara, at John.Lazzara@hdrinc.com.

■ **Treasurer’s Report**

▲ A treasurer’s report was presented at the March, April, and May meetings. All reports were approved.

■ **Highlights from Illinois Section Activities and Group Reports.**

▲ **IIT Pre-Trans Program** – IIT hosts a summer program for students interested in engineering. The IL Section will continue to sponsor the IIT program again this year.

▲ **NCEES Issue** – Illinois State Licensing Board. The IL Section has been following the recent NCEES PE licensing issue. The State of Illinois’ annual membership fee to the NCEES is outstanding. Illinois is in the process of working out payment arrangements with NCEES to avoid any issues with processing reciprocity requests from Illinois PE’s and potential affects on the PE exam in October.

▲ **Annual President-Elect/Student Scholarship Spring Dinner** – The event was held on April 19th at Maggiano’s. The Order of the Engineer ceremony was also conducted at the event. Seven student scholarships were awarded

from the IL Section Institutes and Groups. The ASCE National President-Elect was the key-note speaker.

▲ **ASCE National Legislative Fly-In (March 15-17)** – Past-President MacKinnon and President-Elect Gora attended the Fly-In event to represent the IL Section. Patrick Lach and Region 3 Governor Darren Olson also attended.

▲ **Illinois Legislative Drive Down** – The Drive Down event to Springfield was held on May 3rd and ASCE will be joining ACEC, APWA, and TFIC. The ASCE St. Louis Section also joined. Any members had the opportunity to speak to their legislative representatives about infrastructure funding.

▲ **Supercharging Your Career** – The IL Section Directors volunteered to help facilitate this three part series. YMG Chairman Robert Brzezson organized the training series that was held in April with 15 ASCE members participating.

▲ **IIT Great Lakes Student Conference (GLSC)** – The GLSC was held April 14-16, 2016 with approximately 18 universities participating. IL Section members including some of the officers volunteered as competition judges.

▲ **ASCE IL Section Annual Dinner Gala** – The Annual Dinner Gala will be held at the Intercontinental Hotel on October 13th. It will be an extra special event this year since the IL

Section’s 100 year anniversary will also be celebrated.

▲ **Region 3 Assembly (August 12th/13th)** – This year’s Region 3 Assembly will be back in Chicago with an excellent line up of speakers and topics. Governor Olson has indicated that ASCE is forming a committee to further evaluate the Raise the Bar initiative and to determine if the organization should continue to move forward with the initiative

▲ **Student Outreach** – The Committee has organized member volunteers to support recent STEM and student educational events.

▲ **Sustainability Committee** – A Sustainability Workshop is being planned for September with a transportation focus this year.

▲ **100th Anniversary Committee** – Upcoming events include a Schaumburg Flyers game outing scheduled for June 3, 2016, a Chicago boat tour in August, and a geo-caching to be scheduled. Special Centennial Pins were created to honor the Illinois Section.

The Illinois Section Board Meetings are held every first Monday of every month with the exception of holidays. The next board meeting is scheduled for June 6, 2016 at 5:30pm at HNTB office located at One S. Wacker Drive, Suite 900, Chicago. Future meetings will be held on August 1st, September 12th, and October 3rd.

*By John Lazzara
John.Lazzara@hdrinc.com*

**ASCE IL Section ASCE Family
Baseball Outing**

Date: Friday, June 3
 Time: 5:30 pm – 9:00 pm
 Place: Schaumburg Booms
 1999 S. Springinsguth Road
 Schaumburg, IL 60193
 Cost: \$20/person (includes dinner & ticket)
 RSVP: <https://www.123signup.com/register?id=pnkvy>

**ASCE IL Section YMG Boat
Cruise Fundraiser**

Women in Deep Foundations
 Date: Tuesday, June 7
 Time: 6:45pm - 9:00pm
 Place: Chicago's First Lady
 112 E. Upper Wacker Drive
 Chicago, IL 60601
 RSVP: <https://www.regonline.com/buildersite/default.aspx?EventID=1769862>

**ASCE IL Section EWRI Chapter
Board Meeting**

Date: Tuesday, June 14
 Time: 5:30 pm - 6:30 pm
 Place: Baxter & Woodman, Inc.
 8430 W. Bryn Mawr Ave.
 Suite 400
 Chicago, IL 60031

**ASCE IL Section T&DI and EWRI
Joint Luncheon**

Dr. Catherine O'Connor, Ph.D., P.E., MWRDGC Director of Engineering
 Date: Wednesday, June 15
 Time: 11:30am – 1:15pm
 Place: Petterino's
 150 N. Dearborn Street
 Chicago, IL 60601
 Cost: \$45-Member
 \$55-Non-member
 \$35-Government
 \$25-student
 \$100 Bronze Level
 (Includes 1 seat)
 \$200 Silver Level
 (Includes 2 seats)

\$300 Gold Level
 (Includes 4 seats-half table)
 \$500 Gold Level
 (Includes 8 seats-full table)

RSVP: [Register Here!](#)

ASCE IL Section T&DI Luncheon
John Fortmann, P.E., IDOT Deputy Director/Region 1 Engineer (SAVE THE DATE)

Date: Wednesday, July 13
 Time: 11:30 am to 1:15 pm
 Place: Maggiano's
 240 Oakbrook Center
 Oakbrook, IL 60523

**ASCE IL Section Centennial Civil
Engineering Boat Tour**

Wendella Boat Ouimette
 Date: Friday, August 12
 Time: 5:30pm - 8:30pm
 Place: Wendella dock
 North Wabash Avenue and the Chicago River, adjacent to Trump Tower
 Chicago, IL
 Cost: \$50 per person
 \$100 Bronze Level
 (Includes 1 Ticket)
 \$250 Silver Level
 (Includes 2 Tickets)
 \$500 Gold Level
 (Includes 4 Tickets)

RSVP: <https://www.123signup.com/register?id=nfyxn>

[Boat Tour Flyer](#)

**ASCE IL Section EWRI 6K for
Water Chicago**

Date: Saturday, August 13
 Time: 9:00 am
 Place: Lincoln Park Chicago
 RSVP: Click [here](#) for more information

**ASCE IL Section EWRI Advanced
HEC-RAS Two-Day Course**

Date: Thursday & Friday, September 15 & 16
 Place: O'Hare Plaza-Conference Room
 8755 W. Higgins Road
 Chicago, IL 60631
 Cost: \$850 ASCE/EWRI members
 \$900 non-members
 \$800 Government employees and students.
 RSVP: Space is limited, so register online at [123Signup](#) soon!

[Course Flyer](#)

**ASCE IL Section 2016 Annual
Awards Dinner Gala (SAVE THE DATE)**

Date: Thursday, October 13
 Time: 6:00pm-7:00pm Cocktails
 7:00pm-8:30pm-
 Dinner/Awards
 8:30pm-10:00pm-
 Networking/Dancing

[Save The Date Flyer](#)

For all Section, Group and Committee events, check out the Section website at:

www.isasce.org/web/section/calendar.html