

The Iowa County



July 2019

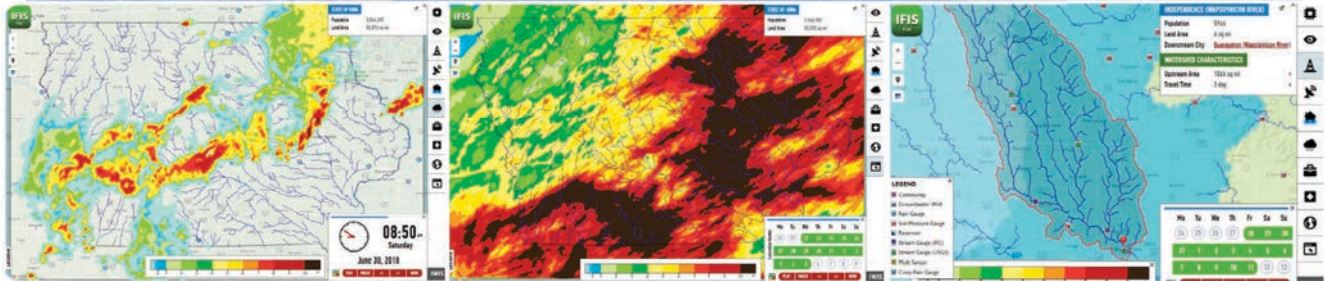
Transportation and Infrastructure

ISAC Annual Conference

This issue is dedicated to Steve De Vries.
The cover photo was taken by Steve in Winneshiek County.



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The Iowa County

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Iowa State Association of Counties

ISAC's Mission:

To promote effective and responsible county government for the people of Iowa.

ISAC's Vision:

To be the principal, authoritative source of representation, information and services for and about county government in Iowa.

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Iowa Auditor of State

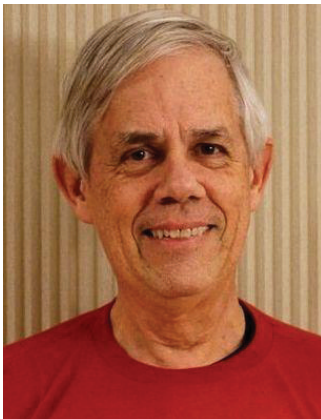
Someone Should Write a Book

This is a common statement heard after one of the many impromptu round table conversations as county engineers finish another session of practicing the art of one-upmanship. You have undoubtedly witnessed such a gathering or even participated yourself at one of the many regional or statewide meetings or events held annually. It is that un-programmed session we all look forward to hearing a humorous story, catching up with what others are currently dealing with, or just finding solace in comparison to our own circumstances and reassuring ourselves we may not have it all so bad. As we dismiss from the table, most are thinking and someone usually verbalized, "Someone should write a book". To my knowledge, no one ever took this suggestion more seriously and literally than one of the most well respected colleagues of this generation of county engineers.

Steve De Vries was usually right in the thick of the things, wherever you would see the congregation of red shirts, that is where you would expect to see him. Not the loudest nor intrusive and not the shyest nor uninvolved, but the one who always seemed to draw the attention of those who wanted to be encouraged by a funny quip, expand their knowledge, or just enjoy a friendly conversation. You could always count on him to enlighten with thought and entertain with his dry sense of humor, the dryer the better. As many of you can testify, a serious engineering conversation with Steve was not merely a casual event, but a learning and thought provoking experience. To refer to Steve as the consummate engineer would be doing an injustice to his seemingly philosophical belief that we can always improve and do better.



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Steve De Vries passed away April 14, 2019, just one year and a day after his last day of work at the Iowa County Engineers Association Service Bureau (ICEASB). Many of you, as I, had the pleasure of working alongside Steve over the years. So you realize the value that he added to each-and-every community of which he was a part. Steve was an avid bicyclist, railroad enthusiast, and accomplished amateur photographer. If you wanted to find the best donuts in the area, just stick with Steve. Not too long ago, through a casual conversation, I learned he possessed significant knowledge from his pursued interest as an amateur glacial geologist, who knew? After graduating from Stanford, his eventual well-rounded professional career began in private consulting, but soon veered into the field of county engineering where he worked for years in both Jackson and Mills Counties. During his career, he was active in many professional organizations and associations including, the Iowa County Engineers Association (ICEA), the National Association of County Engineers, and the Iowa Chapter of American Society of Civil Engineers past president. The capstone of his career, his pride and joy, and the work he poured his heart and soul into was ICEASB.

Steve inspired, catalyzed, and founded ICEASB. Working alongside other county engineers, Steve provided the leadership, foresight and vision of what the bureau's mission could become. He spent many hours developing the purpose, process and prototype that would later become ICEASB, as we know it today. His time as county engineer gave him valuable insight as to which electronic tools and software applications would most benefit the county engineering community, and that made him the prime candidate to become the Bureau's first Executive Director in 1998, when ICEASB started.

Some may remember how the initial emphasis to create ICEASB focused on better communication, and Steve's idea that it also needed a significantly bigger objective and one that all counties would readily agree was vastly needed, project development coordination. Thus, the first two projects created were ICEASB data-interchange service and Transportation Project Management System (TPMS). To get a full appreciation of the foresight to create ICEASB it is important to realize that what was to become the internet was just getting started. The Internet was mainstream only among researchers in the late 1980's, and Silicon Valley in the mid-1990's, but IT would not become mainstream for most U.S. households until 2001 and after. TPMS was a revolutionary concept to say the least, allowing county engineers to electronically plan, program, budget, and develop construction projects. With each step of the project programming and development, it allowed electronic review, approval, and tracking from the various agencies assigned to those responsibilities. This concept soon attracted widespread use by counties, cities, consultants, and state agencies. To date, TPMS has facilitated the processing of over 22,360 projects and is still in use today. The re-write of this almost 20-year-old application is one of the main projects the service bureau is working on today.

Feature - Transportation and Infrastructure

Many of the earlier web applications were created to satisfy legal requirement such as the mandated Secondary Road Five-Year Construction Program and Annual Budget, as well as the Annual Report, due by September 15 of each year. Oh no, we cannot forget everyone's favorite mandatory accounting requirement, GASB-34, which I am sure cost Steve a few additional gray hairs.

Over the years, many of the electronic tools developed were Steve's brainchildren, as he would evaluate what tools could make the work of county engineers more effective and efficient. Some of the web-based software application created under Steve's direction include the Local Lettings Toolkit, assisting counties in working through the local letting process; the Local Project Pay Voucher Tool, tracking the progress and pay of contractors; and the Road Closure Notification Tool, useful in transmitting important messages to numerous interested parties in a few key stroke and even fewer minutes. Although Steve had plenty of his own ideas to keep the four web-app developers and one IT manager busy, but he was always inclusive of others providing input and he would be more than a little exited when a county engineer would offer a fresh idea for the Service Bureau staff to develop. Steve would often proudly remark that in the early years of the service bureau, he would ask for county engineer's direction in potential application development, somewhere along the way that happened, and we now have more ideas than we can accomplish.

I remember early discussion with Steve on some concepts of what would become the ICEASB Work Order System and eventually the application went out for production. Those secondary road departments that adopted the system found the real-time field-to-office work tracking and communication features to be truly cutting-edge technology. Once counties got a taste of the type of products the Service Bureau could produce other field-to-office app ideas flourished. From those ideas and not long after the work order system was developed, the signs program and the culvert inventory program were deployed for use by any interested county road department. Under Steve's direction, the ICEASB developed some 45 to 50 web-based electronic applications, and provided data services assisting the ICEA in working through many secondary road issues.

After Steve's last day of work at the Service Bureau in April of last year, he decided his next project was to write the proverbial book. He began this new venture drafting several chapters about his experiences as county engineer. Although I do not know how far along he got in this book, Steve's career of service to counties "wrote" many full chapters for all who knew him and worked with him. His contribution to county engineers in creating the Service Bureau amounts to a lasting legacy of a magnitude that would be difficult to contain in many volumes of books. We are blessed and have truly benefited from Steve's contribution to the chapter he wrote in each of our life stories, and he will not soon be forgotten. It indeed takes a special person, like Steve De Vries, to leave such a significant and enduring legacy.

Perhaps, as a testament to the witness of Steve's life, the parting round-table comments of the future could be modified slightly to state, "Everyone should write a book."

Employment - County Engineer

The Montgomery County Board of Supervisors is accepting resumes for the position of county engineer. Applicants must have an Iowa Professional Engineering License. Registration as a land surveyor in Iowa is preferred, but is not required. Montgomery County, Iowa, with a population of 10,225, is a rural county located in southwest Iowa. The county seat is the community of Red Oak. The engineering department has approximately 25 employees. The Engineer plans, coordinates, assigns, and supervises all engineering and construction work performed by the county secondary roads department, as well as independent contractors. In addition, the engineer will prepare and let contract documents for projects, present an annual budget, and a five-year construction program identifying future road improvement projects, and work with union representatives on employment matters. The ability to establish and maintain an effective working relationship with all county personnel, other government agencies, contractors, vendors, and the general public is absolutely essential. Possible salary ranging from \$90,000 - \$110,000 with salary negotiable depending on experience and qualifications.

Resumes may be sent to: Montgomery County Auditor, 105 E Coolbaugh, PO Box 469, Red Oak, IA 51566 or sburke@montgomerycoia.us. Resumes will be accepted until the position is filled.

Feature - Transportation and Infrastructure

Devastating Floods Hit Southwest Iowa

Multiple waterways including the Missouri and Platte rivers have escaped from their banks this spring. The impact of flooding in southwest Iowa began in mid-March and continues today, damaging nearly everything, including protective levees and transportation infrastructure, in the area.

For the Iowa Department of Transportation (DOT), restoring mobility while preserving safety has been the top priority. With multiple levee breaches removing protections from the raging rivers, restoring and maintaining mobility has posed a significant challenge.

The main Iowa DOT-controlled roads that have been impacted include I-29 in segments from Loveland south to the Missouri border; I-680 from the Nebraska border to I-80; U.S. 34 from the Nebraska border to I-29; Iowa 2 near Nebraska City to U.S. 275; and Iowa 333 and U.S. 275 near Hamburg.



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For each roadway except Iowa 333 and Iowa 275 which have remained closed since mid-March, a cycle of water receding, repairs being made, roadways reopening, and then being closed again by flood waters has been the norm.

The most significant roadway damage was initially seen on U.S. 34, I-29 near the 65 mile marker between Crescent and Honey Creek and the northbound I-29 bridge at the 8.5 mile marker. Regular coordination conference calls including district, bridge and road design, operations, contracts,

purchasing, communications, and other staff are being held to keep all impacted Iowa DOT offices in the loop of what is happening or needed to happen to get people moving again.

Once the first round of water started to recede in April and damage assessments could begin, design engineers very quickly pulled together information so that emergency bid lettings could take place and repair work could begin.

More than 70 emergency response projects were entered into the Iowa DOT's online system between mid-March and late May. These included mainline, shoulder, and roadside slope projects.

As the water continued to recede in May, Iowa DOT crews from around the state converged on the southwest Iowa counties that came under Governor Kim Reynolds's disaster proclamation to assist with debris removal. More than 30 employees from four of six Iowa DOT districts brought equipment to the area and hauled thousands of loads of debris, especially from the hard-hit town of Pacific Junction.

Keeping the public in the loop

In mid-March the Iowa DOT was asked to develop a website, <https://floods2019.iowa.gov/>, that serves as a statewide one-stop-shop for flood-related information including recovery assistance, damage reporting, transportation impacts, access requests, and more.

Feature - Transportation and Infrastructure

The state's [511 system](#) is the main hub of travel-related information. Travelers can get the most accurate road closure and condition information including dozens of camera locations. Throughout the duration of the flooding, improvements to the site are being made including increasing the number of cameras available to show people the actual condition of closed roads. Iowa DOT news releases and social media accounts highlighted milestones to impacted infrastructure.

The up-and-down nature of some roadways, in particular Iowa 2 near Nebraska City, has been especially hard on commuters in the area who work in one state and reside in the other. Without the Iowa 2 connection and other river crossings, commuters have faced hours-long detours depending on which crossings were open at any given time. In response to these significant impacts the Iowa DOT identified and implemented innovative solutions to reopen roadways. On Iowa 2, jersey barriers were placed on each side of the road. A mat and layers of varying sizes of gravel were laid down to get people moving again even as water flowed under the temporary roadway surface. This solution provided limited mobility for a period in May before additional flooding caused this road to shut down again.

Planning for the future

Because this is the second major flooding event for this area in the last eight years, Iowa DOT engineers began identifying projects that would not only accomplish the immediate mobility goals but would add an extra layer of protection against future flood damage.

The process of identifying areas of the system that are most susceptible to damage is being done in collaboration with Iowa DOT's consultant, HDR, Inc. This longer-term view includes 2-D modeling that can show potential inundation in specific areas during a variety of conditions. This modeling will help evaluate concepts for improvements and identify potential future at-risk areas.

In addition, Iowa DOT is developing a process of identifying locations in our infrastructure that are most critical to maintaining mobility. Once identified, Iowa DOT can take look at even stronger protective measures in these areas.

While none of these tools can prevent future flooding, they will give Iowa DOT better information to prepare for and minimize flood damage and be able to reopen critical infrastructure more quickly in the future.



Initial damage to I-680 shoulders taken April 1, 2019.



For I-680 "betterments" to add resiliency to the slope of the roadway include the installation of concrete flexamat.

Feature - Transportation and Infrastructure

Iowa's Grant Application for the Competitive Highway Bridge Program

Finding creative ways to fund the modernization of Iowa's aging infrastructure is a challenge shared by the Iowa Department of Transportation (DOT) and our county and city partners.

In September 2018, the Iowa DOT learned of a federal grant opportunity for bridges, referred to as the Competitive Highway Bridge Program (CHBP). The grant made available \$225 million to 25 states classified as "rural," for the replacement or rehabilitation of bridges.

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When the grant opportunity was discovered, Iowa DOT staff immediately contacted representatives from cities and counties across Iowa, as well as the Associated General Contractors (AGC) of Iowa and the Federal Highway Administration (FHWA) Iowa Division, to create a working group to collaborate on developing a grant application. This working group met six times over a three-month period in order to reach a clear agreement on the bridges the request would include, how to best meet grant funding requirements, and to collaborate on the application.

The collaboration was critical because an element to this grant required bridge projects to be "bundled" with at least one other bridge in the same construction contract. The group's

fast action was required due to the tight 90-day application deadline, which was December 4, 2018. While only state DOTs could apply for the grant, each state was allowed to submit up to three applications, which were to be ranked by the state from most important to least important.

The Iowa DOT, along with our partners, agree that all bridges are important to the state of Iowa; therefore, all bridges included in the grant application went into one large application. This application for the state of Iowa included 77 bridges: four state Iowa DOT bridges; five city-owned bridges in four cities; and 68 county-owned bridges across 45 counties. The total cost of construction for these bridges is \$61.2 million. Iowa requested \$45.9 million federal-aid participation of total construction costs, which is 75% of the construction costs. The remaining construction costs will be matched with non-federal-aid funding sources from each entity.

How did the stakeholders coordinate which bridges were to be included in the application? Bridges were carefully selected using a data-driven selection criteria to determine which county and municipal bridges would be included in the CHBP application. This application includes bridges considered "structurally deficient," bridges with average daily traffic counts greater than 100, and generally, bridges with a total length of less than 150 feet. County bridges that fit that criteria were then ranked based on a priority point system that had already been established for another bridge funding program in Iowa. The city bridges were selected by prioritizing a list of bridges already on a City Bridge Candidate List awaiting funding. The Iowa County Engineers Association Service Bureau played an instrumental role in the county data analysis to determine which bridges got included in the applications.

For these grants, new ideas are highly valued. The applications from each state will be scored based on innovations in design, materials, or construction techniques. Other out-of-the box ideas could include efficiency of the environmental permitting process or other modernized project delivery, and innovative financing options such as private sector funding. Other items that the applications are being ranked on include a benefit cost analysis, as well as "project readiness" with a bid letting before September 30, 2021.

Feature - Transportation and Infrastructure

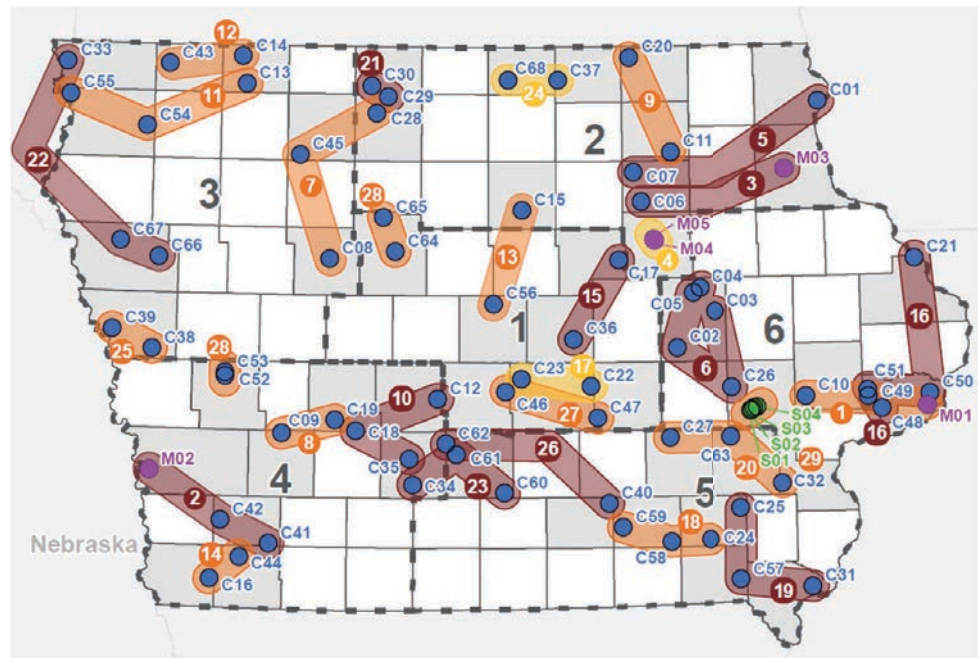
Iowa utilized Standard Bridge Plans for almost all of the bridges in this grant application, which is an approach to bridge designs only used in Iowa. The Standard Bridge Plans include bridge plans that are already structurally designed and come in various lengths, so a designer only needs to determine the length of bridge needed, based on the drainage area and other hydraulic factors. Because of the short timeframe to get a bridge designed and let, the length of the bridges chosen for this application are generally less than 150 feet long. This allows the Iowa DOT Standard Bridge Plans to be utilized, as the standards only go up to 243 feet in length. The shorter length bridges are also easier to obtain multiple types of environmental permits, such as permits from the U.S. Army Corps of Engineers, as well as the Iowa Department of Natural Resources.

We listed our proposed bridge bundles in the grant application; shown below is a picture of the proposed bundles. The bundles generally have different agencies bundles together under one contract.

If Iowa is awarded this grant, the additional funding will enhance our regular dedicated bridge funding, allowing the state of Iowa to replace additional structurally deficient bridges more quickly.

With this application for CHBP funding, we believe that improving a mix of municipal, county, and Iowa DOT bridges will balance Iowa's freight needs, promote economic prosperity, and maintain critical, local access to many Iowa farming communities.

This grant application represents a great collaboration among the CHBP working group including Iowa DOT, ICEA, APWA, AGC, and FHWA. The ability to work as partners across agency boundaries for the good of the state as a whole is one thing Iowa is known for nationwide. If the state of Iowa is fortunate to be awarded this grant, the CHBP collaboration group will continue to meet, coordinate bridge bundles and finalize project development, bid letting, and construction.



Additional Bridge Funding for Iowa DOT and Eight Counties

In September 2018, Iowa DOT was awarded a \$1 million FHWA Accelerated Innovation Deployment grant. The Iowa Highway Research Board matched the federal funds with \$250,000 to provide the funding for a unique collaborative effort between the Iowa DOT and eight Iowa counties.

The primary objective of the project is to utilize innovative contracting to replace eight county-owned bridges in eight different counties under one materials package using prefabricated bridge elements and other innovative materials. The project uses newly developed Iowa DOT Single Span Concrete Box Beam Bridge Standards with ultra-high performance concrete (UHPC) connection details.

By combining the eight projects, the counties will be able to take advantage of economies of scale by bundling the supply of the standard box beams and UHPC connection material into one contract. Bundling the projects also makes the use of innovative materials a much more viable option for local agencies. These bridges will be completed during the 2020 construction season.

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Early Research Beginnings

In 1949 the 53rd Iowa General Assembly passed legislation creating the Secondary Road Research Fund to be administered by the Iowa State Highway Commission in consultation with the state's county engineers. The fund was to be expended in pursuit of solutions to engineering problems in the construction and maintenance of Iowa's secondary roads. To administer this fund and to guide the research, the Iowa Highway Research Board (IHRB) was created within the highway commission. By creating the Secondary Road Research Fund and the IHRB, the state of Iowa placed itself in the forefront of highway research in the United States. Although the federal government had engaged in highway research since 1893, results had been mixed. State highway authorities, including the Iowa State Highway Commission, had also conducted ad hoc research in problems of interest. By 1949, however, no sustained program or central management for research had emerged in any of the states. Thus, the creation of the IHRB marked a new departure for engineering research. By its actions, Iowa was the first state to create a central agency to manage a highway research program.

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The IHRB originally consisted of 11 members serving three-year terms. Six members were nominated by the president of the Iowa County Engineers Association (ICEA). These appointments were made by highway commission districts to ensure that the Board would be geographically balanced and funds equitably apportioned. Three appointments were made by the Iowa State Highway Commission. The presidents of what were then the State University of Iowa and Iowa State College each nominated one member. In 1950, six projects were selected for study for approximately \$181,000.

Today's IHRB remains as it was established in 1949. Currently a 15-member board represented by seven county engineers, one from each of the six Iowa Department of Transportation (DOT) districts and a standing IHRB representative. Four members representing the Iowa DOT, two municipal engineers, and representatives from the University of Iowa and Iowa State University. In fiscal year 2018, the IHRB completed 15 projects, initiated 20 new projects, and had over \$2.3 million dollars in expenditures coming from the primary, secondary, and municipal road research funds.

IHRB leads the way for Innovation

In November 1960, IHRB approved HR-74. This project furthered the construction of a bridge designed to include prestressed steel I-beams. The bridge, the first of its kind in Iowa, was located in Pottawattamie County. The highway commission viewed the project as a good opportunity to give as many steel fabrication contractors as possible experience with the new method of construction.

In 1964, IHRB approved HR-95, "Repair and Protection of Concrete Bridge Superstructures." This work was the foundation for later work that resulted in the development of the dense concrete overlay technique, which solved a major bridge maintenance problem, saved Iowa counties and the Iowa State Highway Commission significant monies, and spread across the country as the industry standard for concrete deck overlays.

IHRB researches new construction materials

The early 1970s saw an increase in the price of asphalt, causing engineers and contractors to look about for alternatives. In January 1975, R.P. Henely, Kossuth County engineer, presented a research proposal to investigate the possibility of recycling asphalt pavement. The old asphalt was to be gathered, crushed, and reused. New asphalt cement, amounting to about one percent of the total to be used, would be added. This work marked the first of several research projects involving the recycling of asphalt and the performance of recycled asphalt construction. The discovery that asphalt could be practically recycled allowed for significant cost savings.

In the early 2000's, Ultra High-Performance Concrete (UHPC), a new class of construction material with high strength and impervious properties, was being proposed for use in the United States. Iowa again lead the way with the first highway bridge in North America using UHPC being built in Wapello County in 2006 in conjunction with a research project completed by IHRB. IHRB has completed five UHPC projects to date to advance the understanding and use of this new and innovative material in the United States and the entire world.

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IHRB looks toward the future

In September 1992, HR-345, a proposal to develop an electronic bulletin board for Iowa's county engineers, was approved. The system allowed Iowa DOT to post bulletins and updates and to furnish resources electronically. County engineers could communicate with each other, as on any other bulletin board, and post questions. The project started slowly as a test but steadily grew in popularity until it was replaced in 1998 by research project, TR-417, Iowa County Engineers Association Service Bureau (ICEASB). ICEASB has continued to grow over the past 20 years to become a one of a kind organization for Iowa county engineers not found anywhere else in the country. ICEASB has developed and provides support for a full suite of computer applications used by all 99 counties in Iowa. A recent IHRB project, TR-761, has begun looking at the feasibility of creating an Iowa Urban Service Bureau to represent the needs of cities and municipal engineers in the state of Iowa.

IHRB trying to solve today's problems

The spring thaw in Iowa can be very difficult for both rural residents and county engineers who are charged with maintaining the granular road systems in Iowa. Since 2015, IHRB has engaged in a series of research projects to look into the science behind the performance of the gravel roads in Iowa and looking at new ways to treat and build gravel roads to make them more sustainable with better materials and less maintenance.

These projects include TR-685, "Feasibility of Gravel Road Recycling." This project was complete in 2018 and produced a gravel road optimization tool for county engineers to use to help them obtain the best granular gradation using existing and new aggregate sources. TR-704, "Performance Based Evaluation of cost Effective Aggregate Options for Granular Roadways" is looking at long term performance and cost of using local aggregates compared to higher quality aggregates being delivered across the state by rail.

In 2018, IHRB started new projects and test sections were built for TR-721, "Low-Cost Rural Surface Alternatives," and TR-725, "Granular Frost Monitoring and Prediction." These projects are looking at stabilization of existing gravel roads using both mechanical and chemical means. The spring of 2019 was extremely hard on gravel roads in Iowa. The test sections held up very well in comparison to gravel sections not treated. Long term performance will be monitored over the next couple of years, but the research is showing some favorable results.

Gravel road research continues in 2019 with three test sections being built across the state for TR-747, "Use of Waste Quarry Fines as a Binding Material in Unpaved Roads," and TR-769, "Course Aggregate Degradation" which will study the effects of weathering and traffic compaction on the larger aggregates in our granular material used in the State of Iowa. These projects will be complete in 2021.

Another possible solution for stabilization of granular roads in Iowa is being researched by IHRB. This research is thru, TR-674, "Evaluating of Otta Seal Surfacing for Low-Volume Roads in Iowa," and TR-753, "Otta Seal Phase II." Otta Seal, originally developed in Norway in the 1960's and used worldwide, is a lower cost alternative to paving roads and is used to seal granular roads. Otta Seal allows the use of local aggregates which reduces costs and produces a dust free sealed granular road that requires little to no blading nor the need to continually add virgin aggregate to the roadway. Preliminary results of this technique are positive if used in the right application. The research project will produce specifications which local engineers and contractors in Iowa can use to build Otta Seal sections. See more on pages 12-13.



Left: TR-721, Clay Slurry Stabilization, Howard County, Iowa. Right: TR-753, Otta Seal Phase II, Cherokee County, Iowa

Feature - Transportation and Infrastructure

Otta Seal

Iowa has more than 71,000 miles of unpaved secondary roads with very low daily traffic volume, but often supporting heavy vehicles (i.e., farm equipment). Since Iowa's county road departments spend more than \$110 million annually for aggregate replacement on gravel roads alone, there is a need to develop a low-cost surface treatment and dust mitigation technique.

Otta seal, first developed and tested by the Norwegian Road Research Laboratory (NRRL) in response to budgetary constraints, was developed in Norway's Otta Valley in 1963 as a low-cost alternative to unpaved gravel roads with low bearing capacity during spring-thaw periods. Nordic countries have extensively used Otta seal with success since its origin, and while recent studies indicate that it has also been applied successfully in Asia, Africa, New Zealand, and South America, it has had only limited use in the United States due to both lack of knowledge and an empirical design approach that requires evaluation of trial or demonstration test sections before extensive deployment.

Otta seal can be fabricated with various aggregate types ranging from natural gravel to crushed limestone of all sizes and soft (low-viscosity) asphalt binder. The aggregate layer is rolled into a sprayed asphalt binder layer, using either a rubber-tired roller or loaded trucks, and compacted until two to three days after construction to achieve "mechanical interlocking" and "asphalt binding," making it capable of carrying traffic loads. During traffic-opening periods of up to 12 weeks after construction, the asphalt binder moves up through the matrix of aggregate voids creating a surface appearance similar to that of cold-mix asphalt concrete.

Several environmental, economic, societal, and institutional benefits have been attributed to use of Otta seals and these benefits include reduced depletion of non-renewable resources (gravel), enhanced durability, and a more favorable life-cycle cost-benefit ratio than more commonly used seal coat surfaces, chip seals, sand seals, and so on.

Otta Seal in Iowa

In September 2017, a section of county road (CR) L-40 in Cherokee County about 4.0 miles long and with an average daily traffic volume of 190 vehicles (up to 30% truck/heavy vehicle traffic) was selected as a site for the first Iowa Otta seal demonstration project, by having a unique case of applying Otta seal for resurfacing and rehabilitation of an existing deteriorated hot-mix asphalt (HMA) pavement system.

A pivotal goal of the investigation was to check the feasibility of using the Cherokee County aggregate gradation for Otta seal implementation. Because the gradation of aggregates suggested by Cherokee County was open graded and could only be used in Otta seal design with ADT of less than 100 vehicles per day with no agricultural trucks and based on the traffic volume of 190 vehicles per day with 30% truck/agricultural vehicles, a dense graded aggregate systems was recommended for the Otta seal installation.

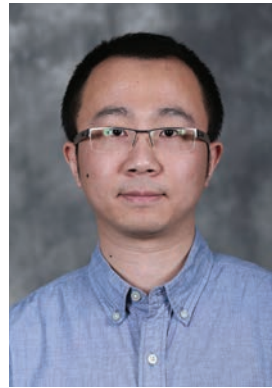
After comparison with NRRL-recommended gradations and MN-DOT Class 5 gradations, control of aggregate spread rate at 50.0 lb/yd² was recommended, in accordance with NRRL based Otta seal design criteria.

The proposed emulsified asphalt, HFMS-2s, to be used with the proposed aggregates can be characterized as high-float, medium-set with high viscosity; it is an anionic medium rapid-setting emulsion that requires special care, both in storage and during application, to maintain optimal quality. The suggested emulsion application rate is 0.5 ± 0.05 gal/yd².

Approximately one week before construction of the first layer, the deteriorated asphalt pavement surface was slurry-sealed at both transverse and longitudinal crack locations to eliminate the potential of reflective cracking by the existing asphalt pavements affecting the Otta seal surface.



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Feature - Transportation and Infrastructure

The first layer of Otta seal construction was initiated on September 5, 2017, and the road was subsequently closed to traffic in both directions. The construction can be classified into three steps: binder spraying, aggregate application, and rolling compaction. After placing the binder and the aggregate, a 12-ton roller made 30 compaction passes during the first day and 15 passes during the second day, finishing 1.8 miles on the first day and the remaining 2.0 miles on the second day. For better Otta seal performance, i.e., to ensure that the aggregate system was well compacted and covered with the applied emulsion HFMS-2s, a 14-ton pneumatic roller was used along with loaded dump trucks after completing the first layer to compensate for the extra aggregate applied and prevent lack of compaction during Otta seal construction.



Two weeks after construction of the first layer (September 21-22, 2017), the construction crew continued to place the second layer of Otta seal using same techniques and procedures, but with additional quality control/quality assurance (QC/QA) operations while monitoring aggregate and binder application rates.

Aggregate spreading is a critical aspect of both Otta seal construction and performance. First, the spread rate during construction must be carefully monitored. The amount of aggregate per unit area directly impacted the compaction and curing steps, because extra aggregate particles can lead to a relatively rougher surface and the binder may not be squeezed upward to fully coat the aggregate surfaces.



In 2018, three other counties in Iowa, Buchanan, Louisa, and Ringgold, along with Cherokee County, implemented eight more Otta seal sites on different existing road surfaces that included gravel roads, a Portland cement concrete road, and a hot-mix asphalt road, with the resulting total length of Otta seal roads in Iowa exceeding 20 miles.

Vista Outlook

Otta seal is capable of providing a thin impervious surface/mat to improve county road serviceability. Based on the Iowa Otta seal experience, performance is highly affected by road subsurface conditions, and field investigations of Otta seal construction are recommended to identify road surface/base preparation requirements prior to Otta seal application.

In 2018, Louisa County successfully implemented Otta seal for two sites using steel slag as aggregates, reflecting the desirability of investigating feasibility of using recycled materials such as reclaimed asphalt pavement as alternatives to virgin aggregates in Otta seals and evaluating the use of Otta seal layers as a holding strategy for Iowa county road infrastructure system.



Feature - Transportation and Infrastructure

Legislative Update

The 2019 legislative session was a busy one for transportation and infrastructure related legislation. As is the case most years and across all the issues we cover, there were bills that we felt would be good for counties and bills that we felt would not. This legislative session seemed to bring out more weight limit bills than we typically see. Whether for certain types of vehicles or specific industries, several enacted bills allowed for heavier weights. As county engineers from across the state and we as an organization tried to explain, our secondary road system and our bridges are not designed to continue to support larger and larger vehicles and loads. Maintaining, repairing, and replacing our secondary road system is already a constant challenge, and additional stresses from heavier loads adds to that challenge and expedites the deterioration. It is our hope that in the future the legislature appreciates these facts and moves away from the trend of allowing greater weight limits.



Lucas Beenken
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This year we had meaningful conversations but couldn't get momentum behind SF 356, a bill seeking to address the unintended consequences of language passed in 2018 that provides for the same weight limits on secondary roads as primary roads for vehicles transporting construction materials and equipment. It is estimated that around 4,000 bridges on the secondary road system will need to have weight restrictions posted. Not only is this a very expensive unfunded mandate for counties, but posted bridges could have a significant impact on the agricultural sector as vehicles that would be allowed based on axle weight would be restricted based on total weight. SF 356 would not fully repeal the language passed last year but would set the weight limits for gravel roads back to the previous levels. This would reduce the number of bridges needing to be posted to around 500 or 600, saving taxpayer dollars that would be better used repairing roads than putting up signs.

Below is a list of enacted legislation, a summary of each, and an explanation of our position.

HF 767 – Electric Vehicle Fees

This bill establishes an additional registration fee for automobiles or motorcycles with battery operated electric motors or plug-in electric motors. After a three-year phase-in the additional annual fee will be \$130 for battery electric motor vehicles, \$65 for plug-in electric motor vehicles, and \$9 for a motorcycle that is either battery or plug-in electric motor operated. The bill establishes excise taxes on hydrogen and electric fuel. For hydrogen used as a special fuel the tax is \$0.65 per gallon and for electric fuel the tax is \$0.026 per kilowatt hour. ISAC supported HF 767 because it modernizes how the care of our roads and bridges is funded at a time when some users are not paying the fuel tax because of the type of vehicle they drive.

HF 769 – Special Weight Vehicles

This bill increases the weight limit for special trucks used for certain farming and commodity transportation purposes from 32 tons to 39 tons and strikes the exemption for special trucks from the maximum weight table for commercial vehicles. The bill also provides an additional registration fee of \$25 per ton between 32 and 38 tons and \$10 per ton between 38 and 39 tons. ISAC registered Undecided on HF 769 because while the weight limits for special trucks was increased, the exemption from the maximum weight table being struck puts in place axle weight limits.

SF 555 – Implements of Husbandry

This bill includes certain sprayers and spreaders of plant food, agricultural limestone, and agricultural chemicals as self-propelled implements of husbandry and increases the maximum allowed weight for such vehicles to 25,000 pounds per axle. ISAC opposed SF 555 because of the increase in weight limits and the detrimental impact that will have on secondary roads as explained above.

SF 629 – Raw Forest Transport Weight Limits

This bill sets maximum axle weights for permitted vehicles transporting raw forest goods, directs the Iowa Department of Transportation (DOT) to distribute a share of permit fees to local governments, and requires Iowa DOT to consult with the local authority (county engineer) to determine the most appropriate route when these permitted vehicles will be traveling on secondary roads. ISAC registered Undecided on SF 629. We were opposed to earlier versions of the bill that did not provide for the consultation with the county engineer. We remain opposed to the increase in weight limits but appreciate the county engineer having the opportunity to recommend the most suitable route.

Feature - Transportation and Infrastructure

Wireless Infrastructure Collocation: Working Together to Connect Iowa Communities

Many Iowans rely on wireless communications in their daily lives. In fact, a recent government report revealed that fifty-seven percent of Iowa households have “cut the cord” and rely entirely on wireless services (see link to Wireless Substitution publication below). Mobile devices allow Iowans to stay connected with friends and families, call emergency services when the need arises, and receive severe weather alerts and news updates.

Wireless connectivity and innovation are major drivers of economic development. Today’s economy is largely mobile, made up of a dynamic wireless eco-system that allows both small and large businesses from across Iowa to offer their products and services locally and around the world.



Wireless Infrastructure Association
www.wia.org

To meet the high demand for connectivity, the wireless industry continues to invest and deploy wireless infrastructure largely through the practice of collocation, which is the wireless industry’s primary approach toward installing new pieces of wireless hardware onto pre-existing infrastructure. Collocation eliminates the need to construct additional separate towers and prevents the unnecessary overcrowding of neighborhoods and communities with multiple structures. Equally noteworthy, the collocation of wireless facilities minimizes the need for new ground disturbance, which is favored by the environmental, historic, and cultural preservation communities.

Working together with the wireless industry, counties and communities across Iowa benefit from collocation in three main ways. First, collocation is the fastest and most efficient way to provide wireless connectivity and coverage to an area because it maximizes the use of existing facilities, reduces visual clutter, and minimizes aesthetic concerns. Second, shared infrastructure is professionally managed, ensuring compliance with all federal, state, and local laws and regulations. Third, collocation promotes competition in the wireless industry by lowering a significant “barrier to entry” for new mobile wireless service providers and other tenants. This neutral host “sharing” model allows new, smaller providers to operate without having to raise capital to build out their own tower infrastructure.

Collocation will play a critical role during the deployment of the next generation of wireless technology also known as “5G.” 5G will also require the deployment of small cells, which are wireless antennae typically attached to existing infrastructure, such as any tower that is already built, as well as fixtures found in the public rights of way including utility poles or streetlights. Through collocation, the entire ecosystem of structures that is already built will be part of 5G deployment.

5G and advanced wireless services will bring many benefits to Iowa communities, including more innovative services and technology for smart cities. Smart cities use electronic data collection sensors for connected services in public safety, public works, telemedicine, autonomous vehicles, and more. Telemedicine, for example, expands healthcare services by increasing remote access to treatment, providing top-quality care for rural Iowans. Autonomous vehicles would allow for more and efficient transportation options for consumers. Innovations like these will make communities safer and more efficient. Recent studies estimate that the wireless industry will invest over \$750 million in Iowa to deploy small wireless facilities and 5G services that will, in turn, increase Iowa’s GDP by over \$1.4 billion and create over 8,700 new jobs (see link to The Race to 5G below). Collocation will play a large role and assist the wireless industry to deploy the 5G network on existing infrastructure. Working together, the wireless industry and Iowa communities will pave the way for a more connected Iowa. The wireless infrastructure industry strongly believes that localities play a critical role in the siting of wireless facilities. Cooperation between localities and the industry is critical to continue serving Iowa communities and to deploy the next generation of advanced wireless services.

The Wireless Infrastructure Association (WIA) is the principal organization representing companies that build, design, own, and manage telecommunications facilities throughout the world. WIA’s members include infrastructure providers, carriers, and professional services firms.

Wireless Substitution: State-level Estimates from the National Health Interview Survey, 2017, CENTERS FOR DISEASE CONTROL – NATIONAL CENTER FOR HEALTH STATISTICS, NATIONAL HEALTH INTERVIEW SURVEY EARLY RELEASE PROGRAM (released March 2019), available at <https://bit.ly/2TYU8vK>.

See The Race to 5G, CTIA – Everything Wireless, 5G Economic Impact for Iowa, available at <https://www.ctia.org/5g/print?state=IA>.



The ISAC Annual Conference is our biggest event of the year! We bring together county officials and employees from every county in Iowa for this two and a half day educational conference.

We are hosting a full-day Flood Track with the Iowa Flood Center during the conference. Registration is included in the price of the conference. More information on page 20.

Also, don't forget to join us in cheering on the Iowa Cubs at this year's County Night at the Ballpark!

ES&S County Night at the Ballpark

Principal Park | August 21

5:30 pm - 11:00 pm

Don't miss this year's conference-wide event! ES&S County Night at the Ballpark is being held beginning at 5:30 pm on Wednesday, August 21 at Principal Park in conjunction with the ISAC Annual Conference. Registration is \$10, and pre-registration for this event is required. A limited number of tickets are available, so register as soon as possible!

Free Shuttle | 5:00 pm - 11:00 pm

Two shuttles will run on continuous loops between the Hilton, Marriott, and Principal Park. The drop off/pick up location will be clearly marked with signage.

Picnic | 5:30 pm

All you can eat hamburgers, hot dogs, chips, potato salad, and soft drinks are included with your \$10 registration.

Game Time | 7:08 pm

I-Cubs vs. San Antonio Missions (Brewers) - registration includes a reserved ticket in Section 4



LEADERSHIP TRACK

9:00 am - 2:30 pm

(Meeting Room 312-314)

The Power of Accountability: Driving Ownership Within Your County Organization | 9:00 am – 10:00 am

During this dynamic and interactive workshop, learners will learn about the Ladder of Accountability and how they can shape a work climate that will support more ownership within themselves and others.

Feedback is a Gift – But, I'd Prefer a Box of Chocolate | 10:15 am – 11:30 am

Walk away prepared to defuse defensiveness in yourself and others through a unique blend of improvisational comedic scenes, the latest leadership research, small group discussion and self-reflection.

Maximizing Energy in a World That Sucks You Dry | 12:30 pm – 2:30 pm

During this workshop, you'll explore the four wellsprings of energy, and take a close look at what you're doing to contribute (or not) to your own health as a leader. Through an innovative mix of improvisational comedy, cutting edge research, and peer learning, you'll walk away with a greater awareness of the capacity you have and a 30-day roadmap that will lead to the energy you want.

Speakers: Cindy Maher and Jamie Guite, Leading Edge Coaching and Development

ISAC General Session

Wednesday, August 21

2:45 pm - 4:30 pm

The General Session will feature Steve Cannon who recently became the first Iowan to complete the 1000-mile journey from Anchorage to Nome on the Iditarod Trail - on his bicycle. Find out more at www.expandyourpossible.com.

Douglas County Commissioner and NACo President Mary Ann Borgeson will also address conference attendees.



ISAC EDUCATIONAL SEMINARS

Wednesday, August 21

9:00 am - 2:30 pm

All educational seminars can be attended by any conference attendee at any time. We have some educational track suggestions, but they are not mandatory. See all seminar detail below.

Flood Track – All day (see page 20)
only

Jester Park Mobile Tour – Morning

Leadership Track – All day (previous page) HR Seminar – Afternoon only

Jester Park Mobile Tour

9:00 am - 11:30 am
(Off-site)

This off-site tour will feature four Jester Park sites that are run by Polk County Conservation. The bus will leave from the convention center promptly at 9:00 am and will return at 11:30 am. Seating is limited, so registrations will be taken on a first come, first served basis. Please dress comfortably and wear walking shoes. Tour will feature: Robert E Jester Nature Center and Outdoor Wellness Center; Jester Park Golf Course; Jester Park Equestrian Center; and the Nature PlayScape and Bison/Elk Exhibit.

12:30 pm - 2:30 pm

HR 202: How to Effectively Manage Public Employees (Meeting Room 302-304)

Elected Officials and Department Heads are increasingly involved in human resources and personnel matters. This presentation will provide attendees with tips and tricks to apply from the moment a job is posted until an employee retires, resigns, or is terminated. The presentation will address HR matters unique to counties and will cover topics beyond the basics of hiring and firing to include day-to-day management of a department as well as response to problem employees or challenging workplace situations.

Speaker: Katherine Beenken, Ahlers & Cooney, P.C.

Conference Food and Beverages

All food and beverages listed below are included in the price of conference registration unless otherwise stated. Please contact Kelsey Sebern at ksebern@iowacounties.org with any special dietary needs (ex: gluten free, vegetarian, etc.)

Wednesday

Morning: Pastries and fresh fruit

Lunch: Choice of BLT croissant, chicken Caesar wrap, or roast beef sandwich, garden salad, chips and dip, and cookies and ice cream

Dinner: All-you-can-eat hamburgers, hot dogs, chips, potato salad, and soft drinks (\$10 fee - pre-registration for County Night at the Ballpark required)

****Coffee available all day in the Schneider Corporation Coffee Lounge in the exhibit hall.**

Thursday

Morning: Egg strata and yogurt bar

Lunch: Slow smoked pulled pork or chicken, summer salad, cheesy potatoes, broccoli slaw, and choice of strawberry shortcake or salted caramel brownie trifles

****Coffee available all morning in the Schneider Corporation Coffee Lounge in the exhibit hall. Coffee will be available on the meeting room level in the afternoon.**

Friday

Morning: Full Breakfast Buffet! Eggs, meat, potatoes, waffles, fruit, and pastries

****Coffee available all morning on the meeting room level.**

Flood Track

ISAC ANNUAL CONFERENCE | AUGUST 21 . 2019



9:00 am - 10:00 am | Building a More Flood-Resilient Iowa

Welcome | Bill Peterson . ISAC

- Flooding in Iowa – Witold Krajewski . UI/IFC
- Where Are We Headed? – Justin Glisan . IDALS
- Working Together – Joyce Flinn . HSEMD

Flood control and mitigation are expensive but reacting to disasters after they occur is even more costly—in dollars, lost economic potential, and human suffering. This presentation will put the significance of Iowa's flooding problem in perspective and raise awareness of the need to continue working together to prepare for changing climate conditions and to improve our flood resilience.

10:15 am - 11:30 am | Iowa Flood Information System Demonstration and Workshop

Moderators | Nate Young . UI/IFC
Breanna Shea . UI/IFC

- Flood Story – Rick Wulfekuhle . Buchanan County EMA

The Iowa Flood Information System (IFIS) is an easy-to-use, Google Maps-based web platform developed by the Iowa Flood Center (IFC) at the University of Iowa. The system provides real-time information on watersheds, precipitation, and stream levels for more than 1,000 Iowa communities. This presentation will provide an overview of the tools and resources available on IFIS, and participants will have an opportunity to explore IFIS on their own and ask questions. In addition, participants will hear real-life stories about the ways IFIS tools can inform decision-making.

12:30 pm - 1:30 pm | A Vision for Iowa: The Iowa Watershed Approach

Moderators | Larry Weber . UI/IFC
Kate Giannini . UI/IFC

- Cara Morgan . IWA Project Coordinator, former Fremont County Supervisor
- Lee Bjerke . Winneshiek County Engineer
- Rod Marlatt . Fayette County Conservation Board, Turkey River WMA Chair

The Iowa Watershed Approach (IWA) is a \$97 million statewide program designed to reduce flood risk, improve water quality, and build community flood resilience. The IWA works in nine unique watersheds that have each formed a Watershed Management Authority (WMA) to represent the needs of landowners and communities. The project engages numerous partners and stakeholders throughout the watershed to make informed, strategic decisions to address complex water resource challenges. The panelists will bring their expertise to the discussion of how the Iowa Watershed Approach has fostered innovation and improved flood resiliency in their communities.

1:30 pm - 2:30 pm | Preparing for the Next Flood

- National Flood Insurance Program (NFIP) – Bill Cappuccio . IDNR
- FEMA Hazard Mitigation Assistance Guidance – Aimee Bartlett . HSEMD
- Flood Damage Assessments – Les Beck . Linn County Planning and Development

Panelists with a broad range of expertise will help to navigate the national flood insurance program and describe the resources counties can tap into to assist them before, during, and after a flood event. Participants will gain a better understanding of the flood mitigation, preparedness, response, and recovery tools they can access.

"It hain't no use to grumble and complain; It's jest as cheap and easy to rejoice.
When God sorts out the weather and sends rain W'y rain's my choice."

James Whitcomb Riley

NACo's Western Interstate Region Conference and Board of Director's meeting was held in Spokane, Washington this May. Our son Michael, Annie, and our two-year-old granddaughter live in the Seattle area. So, my wife and I went out a few days early to visit Clementine. The four-hour drive from Issaquah to Spokane was an experience for me since I had never driven through mountains before. Kind of like driving through the Loess Hills of western Iowa, only more so. Not to mention dropping down into the Columbia River Valley and then back out following semis going 20 miles per hour. After that it leveled out into semi-arid farmland and on to eastern Washington.

I always thought the Loess soil we have was unique. Not so. Our Ag Committee took a mobile tour of the Palouse region south of Spokane. The Palouse is windblown Loess soil that was deposited after the glaciers retreated. Similar to our Hills but not as dramatically steep. I suppose that is what makes our Hills unique. Nor is it as highly erodible, since I didn't see a single terrace or any evidence of soil stabilization. It was all just no till wheat country. A local historian gave quite a talk on the socio-agro history of the region and quoted two Iowans - Tom Vilsack and Norman Borlaug. The second part of the tour was a wind farm. They are very proud of their 58 turbines. That seems rather small to us, but they did mention Iowa during the presentation stating we are leading the country by producing 1/3 of our electrical energy from renewables. It was kind of neat that Iowa was mentioned three times during the tour. Oh, yeah. One more thing. It rained...again.

One of the speakers at the conference was Washington Secretary of State, Kim Wyman, a former county election commissioner. She spoke about election security and access for the voters. It is a delicate balancing act. Because of all the scrutiny of our election, our biggest concern is keeping voters trust in the election system. As we increase security measures we may be compromising the voter's ability to easily vote. Hackers are not getting into our voting system in Iowa because the voting machines are not connected to the Internet. However, our I-Voters registration system is web based and hackers are trying to get into it. Ms. Wyman says that Washington is going to integrate the two systems. That concerns me. Could someone hack into the registration system then from there into the election management system? She quoted a cyber expert that she worked with. "Don't concentrate on keeping someone out, but assume someone is in already."

At the Board of Directors meeting we were updated on issues by Director Chase and several staff. Legislative Director Deb Cox reported that 101 new members of Congress were elected in 2018, half of the current membership is new in the last five years, and 75 of them are former county officials. Over 4,000 bills were introduced and 16 of those were passed. As of that time, no agreement had been made on infrastructure funding, and the Highway Trust Fund will be insolvent by 2021 if nothing is done. The elections bill will have more funding for cyber security. Director Chase wants NACo to be the voice of election information. The Elections Committee, on which Grant Veeder, Black Hawk County Auditor and NACo Board Member, is a member, is trying to raise its profile so that they would be more effective in influencing election legislation at the federal level. In early June, Grant and Jamie Cashman, ISAC Government Relations Manager, attended a meeting in Chicago with NACo staff and others to make plans for this endeavor. This makes sense to me. If elections are held at the county level, then county election folks should be at the table, because they know how to run an election. I found this out personally in my short tenure as election commissioner for Pottawattamie County. Most people don't know what it takes to run an election. They may think they do, but they really don't have a clue.

Since *The Iowa County magazine* has been running themed issues, I've tried to make a connection with the theme. No luck this time. I should have got this in last month in the wind power issue, but the only recurring theme I've experienced in the last year is rain. It rained last year in Sun Valley, then Nashville, and in San Diego of all places. And then again in Washington, D.C. It rained on us a bit on the mobile tour, but the next day it poured hard enough to flood the streets of downtown Spokane. I deliberated quite a bit on the lead off quote. Should I use it with all the flooding we've been experiencing? Is it a happenstance of nature, climate change, or the fault of the Army Corps? Either way we can't be satisfied with the hand we've been dealt. Riley of "When the Frost is on the Punkin" fame wrote many poems about the pastoral farm life in the late 1800's. "Wet Weather Talk" addresses day to day farming and dealing with the weather. Noting that "We are not the boss of this concern." So, let me leave you with this last stanza from Riley's "Thoughts Fer The Discouraged Farmer."

"Then let us, one and all, be contentud with our lot;
The June is here this morning, and the sun is shining hot.
Oh! let us fill our harts up with the glory of the day,
And banish ev'ry doubt and care and sorrow fur away! Whatever be our station, with Providence fer guide,
Sich fine circumstances ort to make us satisfied;
Fer the world is full of roses, and roses full of dew,
And the dew is full of heavenly love the drips for me and you."



Melvyn Houser

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Pottawattamie County Auditor

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2019 calendar

July

- 11-15 NACo Annual Conference
(Clark County, Nevada)
- 17-19 Auditors Annual Conference
(Burlington)

August

- 20 ISAC LPC Meeting
(Veterans Memorial Community Choice Credit
Union Convention Center, Des Moines)
- 21-23 ISAC Annual Conference
(Veterans Memorial Community Choice Credit
Union Convention Center, Des Moines)

September

- 15-18 ISSDA Jail School
(Holiday Inn Airport, Des Moines)
- 18-20 ISAC Board of Directors Retreat
(Dubuque County)
- 26 ISAC LPC Meeting
(ISAC Office)

October

- 6-9 Assessors Fall Conference
(Airport Holiday Inn, Des Moines)

November

- 20-21 ISAC Board of Directors Meeting
(ISAC Office)

December

- 8-10 ISSDA Winter School
(Airport Holiday Inn, Des Moines)
- 11-13 2019 Iowa County Engineers Conference
(Veterans Memorial Community Choice Credit
Union Convention Center, Des Moines)

January 2020

- 15-16 ISAC University
(Sheraton West Des Moines)
- 30 Statewide Supervisors Meeting
(Embassy Suites Downtown Des Moines)

March 2020

- Feb 29-March 3 NACo Legislative Conference
(Washington Hilton, Washington, D.C.)
- 12-13 ISAC Spring Conference
(Veterans Memorial Community Choice Credit
Union Convention Center, Des Moines)

If you have any questions about the meetings listed above or would like to add an affiliate meeting to the ISAC calendar, please contact Kelsey Sebern at ksebern@iowacounties.org.

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IP Pathways

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Iowa Public Agency Investment Trust
(IPAIT)

Platinum Preferred Vendors

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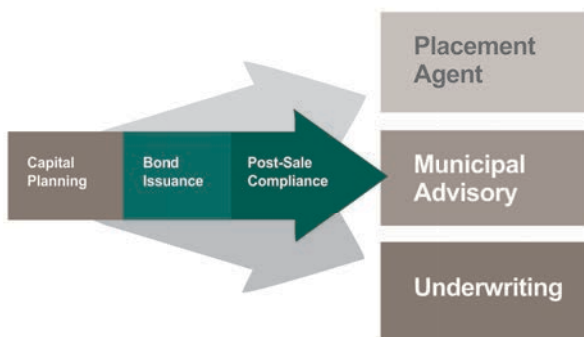
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