President’s Message

Well, folks, we are on the final lap of my term as your president, and I must say it has been quite a ride. We have enjoyed five TML representatives, survived a recession, and overcome numerous other obstacles. While the challenges have been many, I am pleased to report that BOAT has not only survived, but has thrived. With the help of your excellent Board of Directors, we have increased our membership by more than 20 percent, we have increased attendance at the Houston BPI, we have established a third BPI to be held in Austin at the Airport Hilton on October 21-24, we have continued our regional seminars, and we anticipate our largest-ever attendance at Arlington’s BPI. We have been blessed with active participation from the cities of Arlington, Corpus Christi, Amarillo, Midland/

Investing in our communities’ future
Killeen Chamber of Commerce seeks out volunteer business professionals to mentor high school students.
Continued

Odessa, and numerous other areas. We have truly become the Building Officials Association of the entire state of Texas. Thanks to each of you for your part in our success.

Thanks to Cheryl Ribich for nine years of dedicated service to BOAT, and thank you to Hillery Stephens for helping keep me sane during that tough first year. Thanks to Lauren Crawford for keeping things running smoothly during the series of TML adjustments, and thanks in advance to Lauren Grossman for the work you have done and for promising to stay with us for ten years. I am holding you to that promise.

Your board has served you well: Mr. Randy Childers of Waco has continued to serve you and has been a steady and consistent reminder to all of us of the core values and mission of your chapter. Mr. Jim Olk of Farmers Branch has been the rock I could lean on when I sought advice. His experience has been very helpful in guiding our chapter. Mr. Scott McDonald of Amarillo has been instrumental in helping this chapter across the entire state; his vision and passion haven taken BOAT to new heights. Mr. Van Tran of Bureau Veritas has reinvented our newsletter and has done a great job connecting us to our professional members. Mr. Bruce Braley of Hewitt has done an excellent job of connecting us to our smaller cities, thus helping grow our membership. Mr. Earl Abbott of Killeen has, in his quiet way, also contributed to growing our membership. He is well thought of in the Central Texas area in which he serves.

Mr. Selso Mata of Plano has represented BOAT at the North Texas Council of Governments by leading the entire Code Review Process. His wealth of knowledge and work ethic will benefit BOAT for years to come. Mr. Mike Olson of McGregor has been one of our most active and energetic members. He has infused new ideas and leadership and has solidified BOAT in the Central Texas area. Mr. Chris Haver has led our efforts to bring regional seminars to the entire state. He continues to promote BOAT and education statewide. He is currently working in the Rio Grande Valley and, as our secretary, is a tremendous asset. Mr. Kurt Kasson of Allen has been our contact for Building Safety Week and is potentially next in line to lead our chapter. He is a proven leader in both North Texas and Region 10.

As you can see, I had lots of help. Your Board of Directors has done a great job. Thanks to each and every one of you. Now, as we prepare for Arlington’s BPI and our annual conference, I am requesting that each of our board members choose one of you, yes you, to begin learning about BOAT. If you have an interest in getting more involved, please let one of us know, and we will begin a mentoring program. Volunteer now, so we don’t have to hunt you down.

Thanks in advance to our future leaders for continuing to make BOAT the best chapter in the nation.

Sincerely,
Lawrence Crow, CBO
Electronic and Paper Plans: You Could Do Both!

How do you perform plan review? Do you use paper plans? Do you scan files for access on your computer? We do.

Have you thought about expanding to electronic plan review? How do you get it accomplished, with budget issues and understanding how it works? Do it in phases. It’s been a 10-year project for us in Plano.

**In the beginning**

We started in an effort to save storage space, due to the many plans that accumulate and the disorganization that can occur in maintaining a plan room vault. In 2001, Plano began digitizing plans to conserve storage space. This developed into a pilot program for electronic plan review in 2007. In 2009, we moved to an electronic format for all plan review submittals. Moving to an electronic format created efficiencies immediately in retrieval of information. Through its use, we have changed the plan review process into a hybrid system of paper and electronic review. Contractors receive our marked-up plans on paper for field review and construction, while in-house documents remain electronic.

In the beginning, there were some issues to protect drawings. Professionals were concerned with their copyright work electronically and releasing dwg cad files. However, this was solved when we moved to .PDF files, which cannot be altered and offer a secure format for protection of copyright and intellectual property. In addition, rules and regulations for architects and engineers’ seals and signatures are allowed to be embedded in plans electronically.

Smaller commercial jobs, and some residential work, usually have no cad capabilities. When this occurs, we simply scan the plans and file them electronically for storage. We use this system to create an electronic plan from paper files, which keeps us from having to store any files in a roll of plans in any room. It makes all files available to everyone in the department on their computer, electronically. Expansion of this process is also possible for field access, and that is a future component of electronic formats that we are currently exploring, as well.

**Costs /benefits**

Working on cad files, sizing plans, zooming in and out, and dimensional constraints can be challenging at first. But with repetition, and after several software evaluations, we found Bluebeam Software. There are many different software types that can perform the same functions, but we have found what fit our needs for value, access, and efficiency. Through the years, we have leveraged the costs by distributing the expenses incrementally and adding accessory hardware for improving our system, including monitors, servers, computers, and software licenses. While we did start this in an effort to organize our plans and eliminate our plan room vault, it led us to plan review electronically and access to all plans from any computer on our network.

**More coming in the future**

The use of computers for construction documents is now commonplace. But it is expanding in different directions. BIM (Building Information Modeling) is a new technology that enables architects to look at buildings prior to construction in a 3D model. They can view the building prior to construction and walk through it, looking for conflicts in structural or mep construction layers. Construction documents are drawn in this format on large projects. I got the chance to view this on a construction site recently, with a contractor flipping through drawings on a large flat screen TV mounted on the wall above his desk. It was an amazing sight! The use of technology is here now, and it is being used to construct many buildings around us. Paper plan review will never leave the industry, but electronic access and common use of the tablet computers or iPad-like devices will continue to expand their reach. Take a look into the future; it’s all around you and coming to a job trailer near you!

- Selso Mata, AIA, CBO
I recently was appointed to be the chair of the ICC Evaluation Service Committee. My term began in February 2013. There are normally three meetings a year, and they take place in February, June, and October. The committee meetings are for three days, and the committee hears about 20 cases. This article will look at the history of ICC-ES and other related information.

The ICC Evaluation Service, Inc. (ICC-ES) is the leader in the United States when it comes to evaluating building products for compliance with code.

**Who They Are**
ICC-ES is a nonprofit, public-benefit corporation that does technical evaluations of building products, components, methods, and materials. The evaluation process culminates with the issuance of reports on code compliance, which are made available free of charge, on the Web to building regulators, contractors, specifiers, architects, engineers, and anyone else with an interest in the building industry and construction. These people look to ICC-ES evaluation reports for evidence that products and systems meet code requirements.

**A New Organization, A Long History**
ICC-ES came into being on February 1, 2003, when America’s four building-product evaluation services officially combined their operations. The four “legacy” evaluation services that came together to form ICC-ES were the National Evaluation Service, Inc.; BOCAI Evaluation Services; ICBO Evaluation Service, Inc.; and SBCCI Public Service Testing and Evaluation Services, Inc. Through the legacy evaluation services, ICC-ES has a history that goes back more than 70 years.

ICC-ES provides assurance that building products and technology meet building code provisions. The activities of ICC-ES are undertaken in a way that supports the exercise of the code official’s approval authority. This eliminates the time and effort associated with each state or local agency designing an evaluation independently. The ICC-ES evaluation report provides a benchmark for all parties throughout the U.S. to rely upon when considering new and alternative building technology.

The introduction of new construction technology does not usually coincide with the publication of new building safety codes and standards. Consequently, ICC-ES provides “alternative materials, design, and methods of construction” as the basis for acceptance of new building technology that is not specifically covered in the codes and standards.

An ICC-ES evaluation report provides the supporting rationale for and a statement of compliance with the U.S. model building codes (200 or 2003 International, 1999 BOCA National, 1999 Standard, and 1997 Uniform), along with any special conditions of use or limitations. An ICC-ES evaluation report provides documentation and assurance of the degree to which a product or building technology meets the model building codes. The report helps the code official consider approval of the technology in an informed and timely manner. As a result, it reduces the burden on the technology proponent and fosters the timely deployment of the technology.

ICC-ES has issued more than 1,500 evaluations of new building technologies and software with respect to code compliance. These evaluations have been performed for many companies and facilitate the acceptance of new products by the building design, construction, and code communities throughout the U.S. To facilitate international cooperation, ICC-ES also participates as a member of the World Federation of Technical Assessment Organizations.

**The Staff**
ICC-ES employs highly experienced evaluation specialists, licensed architects, and professional engineers with expertise in such specialized fields as civil, structural, fire protection, and mechanical engineering.
Continued

Collectively, the ICC-ES technical staff has literally centuries of experience in evaluating construction products and technology.

**The Report Process**

The report process begins when a company submits an application for an evaluation report. The application is normally submitted with supporting data, such as product information and test reports, along with appropriate fees to cover the cost of the evaluation. Once the application is received and before a report is issued, ICC-ES assigns a member of its technical staff to evaluate the data and work with the applicant to make sure compliance is proven with either the building code or an ICC-ES acceptance criteria or evaluation guideline. (The latter documents are approved by an ICC-ES Evaluation Committee that is made up of building officials from across the United States.) Once the applicant has satisfactorily answered all questions raised by ICC-ES staff and has fulfilled other applicable requirements, an evaluation report is issued and posted on the Web, where it may be referenced by thousands of building departments and other interested parties. The applicant is also provided with a printed copy of the report.

New reports are issued for one year, after which they are re-examined and may be reissued at one- or two-year intervals, depending on the applicant’s preference.

**What ICC-ES Can Do for You**

- If you are a building regulator, ICC-ES can tell you about products, systems, materials, and methods that are code-compliant.
- If you are a manufacturer, a report from ICC-ES will make it easier to market your building-related product, because you have solid evidence that your product meets code requirements. The report on your product is available for reference by thousands of building departments, as well as other construction-industry professionals, free of charge, through the Web. For a tiny unit cost, you reach huge numbers of regulators and end users.
- If you are a specifier, designer, architect, or contractor, and you want evidence for the local building official that you are using code-complying materials, look for an ICC-ES report!
- If you are a member of the general public, you, too, benefit from the work of ICC-ES, because ICC-ES actively promotes public safety in the built environment. Additionally, you can use evaluation reports to help in selection of building products for your own home or other property.

**Contact Them**

To better serve our clients and the public, ICC-ES maintains two regional offices. I invite you to contact them at any of these numbers or on the Web:

Visit them at [www.icc-es.org](http://www.icc-es.org).

- Los Angeles Business/Regional Office: Phone 562-699-0543; Fax 562-695-4694
- Birmingham Regional Office: Phone 205-599-9800; Fax 205-599-9850

You may also reach them by e-mail at [es@icc-es.org](mailto:es@icc-es.org).

With all the technology advances in the building construction industry, I believe ICC-ES is a valuable tool for the building official to use to help navigate all the alternate materials that are available in the marketplace today.

- Randall R. Childers, CBO, CPM
As we all know, there are always opportunities to give something of ourselves back to our communities. This year, our building and code enforcement staff participated once again in an event that paired high school students with local business professionals to share a part of our workday together.

Every year in January, our Killeen Chamber of Commerce seeks out volunteer business professionals to mentor high school students for the annual Groundhog Job Shadow Day. Local mentors are invited to pair up with high school students to demonstrate the connection between academics and careers and to help them prepare to join the workforce.

This year, this one-day event was on Wednesday, January 30. This was the third year that the Killeen Building and Inspections Department and our code enforcement staff participated in the program.

When we first began, we were not sure if we really had anything to offer. I cannot think of a time when any young adults or students ever said they would like to become a building inspector or code enforcement officer. Mostly what you hear is they want to be doctors, attorneys, etc. Some will speak of the military, police, or fire, but never building and code inspectors.

But after putting our names in the hat, it did not take long for the students to enjoy riding shotgun with a building inspector or code officer. Riding with a building inspector, they got to visit various construction sites, look at homes under construction, and see commercial businesses being built. They really enjoyed filling out a red or green tag and “slapping” it on a window or wall.

The students who rode with the code officers had fun learning the typical nuisances we enforce and putting notice of violation placards on vacant buildings. They learned quickly and started pointing out similar violations as they traveled the streets. Some of them wanted to patrol their own neighborhoods.

The day went fast. At 9:00 a.m., we had to be at the Killeen Convention Center, where the students arrived by bus. After a brief talk by the mediators, we were each assigned a student and then were allowed to leave.

In our department, we all met back at city hall and showed them around the offices and permit counter, informing them of the importance of quality enforcement of the life safety codes and nuisance abatement. After our discussion, the students hit the town with the inspectors and code officers to be a part of their daily duties.

For lunch, we all met at a local pizza buffet place and fed them well. After that, we took some group pictures to capture the moment and then they were back on the road until it was time to return them to their individual schools before 3:00 p.m.

Every inspector and code officer who participated in this event—including me—has been blessed by it. The opportunity to spend a day with a student interested in what you do was really priceless, because when the day ends, you know at least one citizen has learned firsthand the importance and value of what we do as code officials. And for us adults, we were reminded what it’s like to be young and impressionable. If you come across this opportunity, therefore, I encourage you to volunteer to be a mentor for a high school student during a future Groundhog Job Shadow Day.

- Earl Abbott, CBO, CFM
It is that time of year again, and we must be aware of the hidden dangers in our own backyards. The swimming pool and spa drain is the danger zone for our children. We must make sure to safely replace these hazardous covers with new, safe, approved covers. One child lost is one too many!

Pools and spas are places we use for sports, recreation, and exercise. They should be as safe as possible. Unfortunately, each year people are injured at public and private pools and spas.

The powerful forces that circulate the water in your pool or spa are capable of sucking young children onto the drains at the bottom or side of your pool or spa. Last year in Florida, four children were killed by this suction force at the pool or spa drain, while others were severely injured.

The good news is that we know how to eliminate many of the hazards that commonly result in injury or death. The Consumer Product Safety Commission has created pool and spa guidelines to help identify and eliminate dangerous entrapment hazards.

There are three primary ways young children can become trapped by the suction forces at the bottom or side of the pool or spa:

1. Hair can be sucked into the drain and become tangled around the drain grate, making it impossible to be pulled out.
2. Many old fashioned pool or spa drain covers that fit flat to the bottom of the pool or spa can suck a child’s body part to the drain, making it impossible to pull them off.
3. Loose, broken, or missing pool or spa drain covers can allow a child to be pulled into the piping below the drain cover, allowing a suction entrapment.

There are a number of things you can do to prevent a child from becoming trapped by the suction forces in swimming pools and spas:

1. Never let children play with the suction drains on the side or bottom of a pool.
2. Check your pool or spa drain cover to be sure it is firmly secured at all times.
3. Regularly examine your pool or spa drain cover to be sure that chemical exposure and ultraviolet rays from the sun have not caused it to decay.
4. If for any reason your child becomes entrapped by a pool or spa drain, you must immediately:
   5. Turn off the pump to the swimming pool or spa.
   6. Get air into the plumbing system in order to release the suction. It is recommended that you remove or break the clear cover over the pump basket or break open the piping in front of the pump by whatever means necessary.

There are a number of swimming pool and safety items available that can prevent drain suction entrapment:

1. Pool and spa drain covers that are ASME/ANSI A112.19.8M-1987 certified. These drain covers have been tested for strength and prevent hair entanglement and body suction entrapment. If you have any questions regarding swimming pool or spa drain covers that are ASMC/ANSI A 112 certified, please contact your local, licensed pool contractor.
2. Safety vacuum relief devices that automatically sense that something is covering the pool or spa drain and in seconds automatically relieve the suction force from the pool or spa drain.
3. Vent piping.

These devices can be easily and quickly installed on any existing or new swimming pool or spa and provide two “layers of protection.” Please inform the public of these dangers. Let us not lose another child due to a faulty or unsafe pool or spa cover!

- Kurt Kasson, CBO
The 2009 and 2012 International Residential Codes contain requirements for the installation of carbon monoxide (CO) alarms for both new and existing homes. The CO alarm requirement is applied when a structure contains fuel-fired appliances or has an attached garage. During the City of Amarillo’s process to adopt the 2012 I-Codes, it was noted that the code did not provide clear instruction for the proper installation/location of CO alarms. The City of Amarillo Construction Advisory and Appeals Board did extensive research to identify best practices to assist in the implementation of this section, focusing on effective execution for those persons performing work.

The majority of manufacturers do not give specific instructions for the installation; however, they provide the locations where NOT to install the devices. The greatest number of questions concerned the height of installation. From the research conducted and the consensus process, it was the City of Amarillo’s opinion that there was a need to provide some optional location criteria. The thought was to define convenient locations for digital displays, avoiding accessibility to small children. Such a location is relative to the height where the expected range for normal breathing would occur, whether standing, sitting, or sleeping. Amarillo’s local amendment also highlights installation areas to avoid, providing clarification and simplified implementation. Included in this article are excerpts from the “Amarillo Residential Code.”

The 2012 International Residential Code (as amended by the City of Amarillo) states in part:

**R315.1 Carbon monoxide alarms.** For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages. (Approved alarms shall be installed in accordance with manufacturer’s installation instructions or located on the wall at a height 42 to 90 inches above floor, avoiding locations near heating/cooling vents or areas which provide turbulent airflow, and minimum 36 inches away from openings to areas of high humidity. Avoid installing CO alarms in kitchens or above fuel-burning appliances.)

**R315.3 Where required in existing dwellings.** Where work requiring a permit occurs in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

It is important to clarify the statement “Where work requiring a permit occurs in existing dwellings…” This section is not specific to a particular trade or permit type. The section requires that any project requiring a permit to comply (that is, building, electrical, mechanical, and plumbing). The purpose is to enhance safety for the occupants of dwellings using fuel-fired equipment or those that have an attached garage.

The intent of this section is for ANY permitted work. The
City of Amarillo Department of Building Safety's position shall be consistent with the 2012 IRC, with a few specific exceptions as listed below:

- Water service line with all work occurring on the exterior of the structure
- Irrigation system installation or repair
- Sewer line with all work occurring on the exterior of the structure
- Exterior siding work (does not exempt roofing or window installations)
- Detached accessory structures, including exterior swimming pools
- Exterior flatwork, driveways, retaining walls, fencing, and similar

For all other projects where a permit is required, the permit holder will be responsible to comply with Section 315.1 or 315.3 as applicable.

Knowing CO alarms save lives, please take the time to educate those persons doing work in the built environment to promote the importance of installation. Together, we are building a stronger, safer Texas.

- Scott A. McDonald, CBO

In today's economy, many cities are adding more and more to each person's job duties. I, for instance, am the director of community development for the City of McGregor. I was hired to be the building official/code enforcement officer, which was a goal of mine when I started doing this line of work. It was going well for about 6-8 months, and then I also started doing planning and zoning, economic development, cemetery grave marker, etc.

It is hard for cities financially to employ every aspect that makes a city run. A lot of small towns have combined the planning and zoning and the building/code side departments together. I knew about planning and zoning, but was no expert at it. You could say that I am a self-taught planning and zoning guy. You have to learn from prior experience, former acquaintances, or pay-for-hire to understand planning and zoning.

People in larger towns and bigger cities sometimes forget that they have other people working for them, and all they have to deal with is building and/or code enforcement. But there are a lot of guys out there who are “ONE-MAN SHOWS” and are self-taught. There are a lot of different training opportunities out there that can help the “One-Man Shows” with their daily duties.

The Building Officials Association of Texas, along with the Construction Research Center, provides educational and training courses for the One-Man Shows and the big boys, as I call it. They will be hosting trainings on May 20-24, 2013, in Arlington, and tentatively on October 8-10, 2013, in Austin. Please try to attend one of these. It will help educate you and will be a great networking opportunity. For more information, please go to www.boat.org and click on the calendar link, or go to www.bpi-tx.com. If you ever need any help, please feel free to contact me at molson@mcgregor-texas.com or 254-379-0560.

- Mike Olson, CFM
Mark Your Calendar!

Committee Action Hearings*

April 21 - 30, 2013
Sheraton Dallas Downtown
Dallas, Texas

Hearing participants will
consider proposed code changes
to the Group B codes

The Committee Action Hearing will be held at the Sheraton Dallas Hotel on April 21-30, 2013. This is a great opportunity to witness part of the code development process. The Building Officials Association of Texas (BOAT) will host an evening event that week, as well. We hope to see you in Dallas.

- The Code Development is split into three groups for review in 2012, 2013, and 2014:
  - The 2013 Cycle will cover Group B: Admin, IEBC, IECC, IFC, ICCPC, IPMC, IRC, ISPC, IWUIC, IZC, and Group A Code provisions heard by Group B Committees.
  - The 2014 Cycle will cover Group C: IgCC.

(The Committee Action Hearing will be held on April 27-May 4, 2014, in Memphis, Tennessee.)

*The old term for Committee Action Hearing was Code Development Hearing, as noted in the cdp ACCESS report.

- Van Tran, CBO
2012-2013 BOAT Board of Directors

**President**  
**Lawrence Crow, CBO**  
Field Operations Manager  
City of Irving  
PO Box 152288  
Irving, TX  75015-2288  
Work Phone: (972) 721-4875  
Fax: (972) 721-2481  
lcrow@cityofirving.org  
Term Ends: 8/31/2013

**Vice President**  
**Kurt Kasson, CBO**  
Building Official  
City of Allen  
305 Century Pkwy  
Allen, TX  75013-8042  
Work Phone: (214) 509-4131  
Fax: (214) 509-4139  
kkasson@cityofallen.org  
Term Ends: 8/31/2013

**2nd Past President**  
**Randall R. Childers, CBO, CPM**  
Building Official  
City of Waco  
PO Box 2570  
Waco, TX  76702-2570  
Work Phone: (254) 750-5671  
Fax: (254) 750-5624  
randycc@ci.waco.tx.us  
Term Ends: 8/31/2013

**Immediate Past President**  
**Scott McDonald, CBO**  
Building Official  
City of Amarillo  
PO Box 1971  
Amarillo, TX  79105-1971  
Work Phone: (806) 378-3045  
Fax: (806) 378-3085  
Scott.McDonald@amarillo.gov  
Term Ends: 8/31/2013

**Secretary**  
**Chris Haver, CBO**  
Building Official  
City of College Station  
PO Box 9960  
College Station, TX  77842-7960  
Work Phone: (979) 764-6254  
Fax: (979) 764-3496  
chaver@cstx.gov  
Term Ends: 8/31/2013

**TML Board Representative**  
**Jim Olk, CBO**  
Building Official  
City of Farmers Branch  
13000 Jupiter Rd Ste 800  
Dallas, TX  75234-6253  
Work Phone: (972) 919-2533  
Fax: 972 919-2544  
jim.olk@farmersbranch.info  
Term Ends: 10/29/2014

**Director at Large**  
**Bruce Braley**  
Dir Planning & Community Dev  
City of Hewitt  
PO Box 610  
Hewitt, TX  76643-0610  
Work Phone: (254) 666-6173  
Fax: (254) 666-6014  
bbraley@cityofhewitt.com  
Term Ends: 8/31/2014

**Associate Director at Large**  
**Van Tran, CBO**  
Vice President  
Bureau Veritas North America, Inc.  
1000 Jupiter Rd Ste 800  
Plano, TX  75074-3724  
Work Phone: (972) 244-6937  
Fax: (469) 241-1849  
v.an.tran@us.bureauveritas.com  
Term Ends: 8/31/2013

**Director at Large**  
**Selso A. Mata, AIA, CBO**  
Dir of Building Inspections  
City of Plano  
PO Box 860358  
Plano, TX  75086-0358  
Work Phone: (972) 941-7177  
Fax: (972) 941-7177  
selsom@plano.gov  
Term Ends: 4/1/2014

**Director at Large**  
**Mike Olson, CFM**  
Director of Community  
Development  
City of McGregor  
PO Box 192  
Mc Gregor, TX  76657-0192  
Work Phone: (254) 840-2806 x 5  
Fax: (254) 840-2950  
molson@mcgregor-texas.com  
Term Ends: 8/31/2013