

# Address to New Members

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Good morning to all and thanks, Gary, for inviting me to address this final membership class of the Casualty Actuarial Society in its first century!

Congratulations to the new Fellows of the CAS. You have achieved a tremendous accomplishment in completing all of the educational requirements set before you.

Congratulations to the newest members of the CAS—our class of 142 new Associates. You can enjoy and delight in this milestone achievement in your young career. Take time this week to soak in all of the collegiality that your membership in this soon to be century old society brings. Then get back to work and finish the process! ☺

Congratulations also to the third class of CERAs. Thanks for assisting the CAS in expanding the scope of our work beyond the traditional areas of ratemaking and reserving.

Most of all, congratulations and thanks to all of the families and support teams that have assisted these new Associates and Fellows in so many ways in order for them to achieve this significant accomplishment. Personally, I know that without the support of my wife, Ann, my employer, and many others over my lifetime, getting through the multi-year journey would never have been possible. So to those in the audience here to share in the joy of your achievement and accomplishment, please accept our thanks for your support and understanding of the time and effort needed to get here.

I also offer my apologies to those families and support teams of new Fellows who happened receive their Associateship credential at the meeting in West Palm Beach in the spring of 2011. You get to hear me welcome the new members again!

Since a significant part of typical every day actuarial work involves looking at the past to project what might happen in the future, permit me to take a walk down memory lane. As I look out and see all of the bright smiling faces, I think back to my first days as an aspiring actuarial student in 1979. I wonder what our world and our profession will look like 30 plus years from now. I began calculating rate level indications before most of you were even a twinkle in someone's eye.

Think about a business world without Microsoft Excel or Word, without personal computers or even programmable calculators. Think about taking your first four actuarial exams without being able to use a calculator. Boy, could we add, subtract, multiply and divide in our head in those days. At my company and probably many others, we had shared access to a small computer made by a company named Digital (now part of HP). It had a terminal, a crude printer and 16K (yes 16K!) of active memory. Most watches today have more than 16K of memory.

We calculated rates and reserves with spreadsheets. Yes, they were green bar *paper* spreadsheets; filled out using a pencil and a simple calculator. We stored the equations in memory—our brains.

Much has changed since then, both in the availability of vastly larger quantities of information and our ability to process that information in less time than we ever dreamed. Our computing tools, both hardware and software, have evolved very quickly. Many of our applications have been adopted from breakthroughs in other related fields or by actuaries in other parts of the world.

Hurricane models were first developed primarily for use in understanding the amount of underwriting risk of an insurance company or by reinsurers to understand the amount being transferred to them. After the wake-up calls provided by Hurricanes Hugo in 1988 and Andrew in 1991, these models and other catastrophe models became an integral component of the ratemaking process for not only the reinsurance world but, maybe more importantly, the primary insurance world.

I recall a discussion following Hurricane Hugo. This event devastated Charleston, South Carolina, and did not slow down until it wreaked havoc and significant damage in Charlotte, North Carolina—225 miles inland! We were told that the data (30 or 40 years) indicated that we needed to raise the property rates in Charlotte by 25% and decrease them along the Outer Banks by 10%. After scratching our heads, we said “There has to be a better tool than 30 or 40 years of experience with a very limited number of observed storms.”

In adopting expected loss information from a hurricane model, we had a tool that would help to quantify some of the known-unknowns. We had an idea that the exposure was great but in a very low-frequency/very high-severity situation, we had not had the fortune or misfortune to observe the cost of these types of events. The use of hurricane models in ratemaking is only about 25 years old.

The introduction of generalized linear modeling (GLMs) first took hold with actuaries and statisticians in the U.K. In the U.S, Progressive’s MBAs were using this technique a few years before the leading actuarial gurus and proponents of GLMs in North America were successful in gaining headway with their application. Actuaries and others saw the power of this technique in personal auto rates. They assisted the expansion to most every line of insurance and beyond the boundaries of ratemaking.

Not to say that we did not understand and embrace the basic concept many years before. We had a technique on *minimum bias* that was developed and shared through CAS *Proceedings* papers by the pioneers of Robert Bailey and LeRoy Simon (published in 1960 and 1963). Even I was very young when those papers were published. These papers showed and explained the issues with development of rates or relativities by splitting the data in only one direction per variable without taking into account any possible interaction with other variables.

Their work on minimum bias is still legendary. But at the time, it was very seldom put into practice due to the computing constraints. As the computing power expanded, we discovered GLMs and a whole new world opened for actuaries.

I will highlight one final point in the recent evolution of the property-casualty actuarial profession. In the mid-1980s, the Actuarial Statement of Opinion on Loss Reserves was first required by the state regulators in the U.S. While still early in my career, I recall that there was serious concern that there were not enough qualified property-casualty actuaries to perform the analysis and sign the opinion letters.

As a point of reference, there were less than 2,000 CAS members in 1986 when I became an associate. The accounting profession saw this as a great opportunity. But through the efforts of CAS and American Academy leaders, the responsibility for signing the Opinion Statements was granted to CAS members.

This is a trip down memory lane for me, but—if you are still awake—what does that have to do with you?

Well, in the course of your professional life, you will likely see changes of equal, if not even greater, magnitudes. Your challenge is to be ever vigilant to spot and explore the many opportunities that these changes will bring along.

In each instance in the past, our profession benefited from the advancements in technology and methodology. We (you) need to continue to thrive on leading the application of these technologies to the “simple” problem of projecting (some say) predicting the future cost associated with risk transfer in the general insurance context and beyond.

Earlier, I mentioned the collegial nature of the CAS. It has been one of the key strengths of the CAS over its first hundred years. Through significant amounts of membership involvement, it is possible for you to become connected to other professionals in this wonderful segment of the actuarial world.

Opportunities such as:

- Serving on various committees (exam committees included)
- writing papers
- presenting at CAS meetings like this one and the professionalism seminar you all have attended to get here
- even sharing ideas at our meetings (legally, please remember that the anti-trust restrictions apply.)

I have met many great people through being involved. Just prior to the CAS Spring Meeting in 1990, I met two CAS members, leaders in the profession, on the first tee. Fifteen years later, they became my consulting partners and mentors.

You can benefit from this involvement too. You can use these professional opportunities to continue your learning (Exam Committee again!).

You also can develop and expand your communication and leadership skills—both these skills in combination with your actuarial training are very highly valued in the business world. As Lee Iacocca, former CEO of Chrysler once said, “You can have brilliant ideas, but if you cannot get them across, your ideas will not get you anywhere.”

Since we are in college football season and in Big Ten country, the legendary football coach at the Ohio State University, Woody Hayes, is at least locally famous for stating: “You cannot pay back but you can pay forward.”

By being an active member of the actuarial profession in some way or another, you can continue the great CAS tradition of “paying forward.” You can assist the profession and enhance your career at the same time. It may be related to the CAS or some of the other actuarial organizations such as the Canadian Institute of Actuaries, the American Academy of Actuaries and the Actuarial Standards Board.

As you can easily see, there are plentiful opportunities for you to become involved in paying forward. Find one. It may lead to others. I know personally that is exactly the way it happened for me and look where it leads and continues to lead.

Your new credential shows that you have satisfied the educational requirements of the CAS for your Associateship or Fellowship.

For the new Associates, you have a few more hurdles to cross but you have shown the ability to succeed. Please continue forward with your exams and, when possible, look for opportunities to become an active participant in the profession.

Fellows, you now have lots of free time. Along with celebrating, reengaging in the real world and working on that to-do list (both from your significant other and yourself), look around for

opportunities to carry forward the CAS tradition of being one of, if not the greatest, member-led professional organizations in the world.

Again to all, my sincere congratulations on your momentous achievements as the CAS approaches its centennial year. To our newest Associates and Fellows, may you eagerly participate, both in your jobs and as part of the profession, in the inevitable changes and exciting future ahead. Exciting times for the actuarial profession and larger risk management industry are awaiting all of us in the next 25 years or more.

To paraphrase a song from the late 1980s by Timbuk3: “Your future’s so bright—You gotta wear shades!”

Thank you and good luck to all!