



Article from

The Actuary

October/November 2015
Issue 5

From Actuary to... Anything You Like

WITH A LITTLE INGENUITY, ACTUARIES CAN USE THEIR ANALYTICAL MINDS TO BE SUCCESSFUL IN MANY AREAS

BY JEFFREY A. BIRD

Browsing through the Society of Actuaries' (SOA's) actuarial directory, you may notice something peculiar; its members have more than 150 non-actuarial professional designations. You will find professors, entrepreneurs, wealth advisers, board members and other actuaries who have moved out of the traditional actuarial space to do something new.

We invited five actuaries to share their stories of how they changed course in their careers by thinking outside of the box, how they applied their actuarial skills and experience in a new area, and how this ultimately benefited them, both personally and professionally. These five profiles demonstrate that with a little ingenuity, an actuary's analytical mind facilitates success in any endeavor. We invite you to consider how you can develop or expand your interests into innovative new areas and ideas, and how you can continuously strive for excellence.



“Broadly defined, an actuary is a problem solver.”

—W. Paul McCrossan, FCIA



W. PAUL McCROSSAN, FCIA, obtained his fellowship of the Canadian Institute of Actuaries (FCIA) in 1969; just three years later, he was chairperson of the new SOA Education and Examination Part 9 Committee covering social insurance and taxation. In helping design the course for the exam, he became knowledgeable about Canadian social security systems. He felt the programs were poorly designed and largely responsible for Canada’s deficit, so in response, he wrote a letter to suggest changes to the Leader of the Opposition who was opposing the prime minister at the time.

“Two weeks after I met with the leader of the progressive conservative party to discuss how he might react to government proposals, the leader was interviewed on a news program about the proposals and he responded as I had suggested,” said McCrossan. “Soon after, I got a call back from the national director of the party and he asked, ‘Would you be interested in helping the party develop immigration policy?’ (About which I knew nothing.) He also suggested I consider joining my constituency executive to see if a political career appealed to me.”

After winning a by-election in 1978 to become a Member of Parliament in the House of Commons for York-Scarborough, the most populous riding in Canada at the time, McCrossan secured a leave of absence from his actuarial role at Canada Life. The transition into politics involved applying his actuarial skills on pensions and unemployment insurance from the get-go.



W. PAUL
McCROSSAN,
FCIA

**FROM ACTUARY TO ...
POLITICIAN**

“I leapt into an unknown field by applying what I knew, which was actuarial science,” said McCrossan. During his third term, McCrossan had political responsibility for the sections of the Canadian federal budget on the reform of public and private pensions.

In 2001, McCrossan almost turned down an opportunity from the Inter-American Development Bank (IDB) to work in South America to help prevent the collapse of social programs spreading to Peru after the Argentinean government defaulted on its debt. After the IDB disclosed that McCrossan would have to go through a request for tender process, he turned them down.

“They said: ‘Hold on, can we ask you three questions? Are you a qualified actuary? Did you serve in a national parliament? Have you designed national social security plans?’” McCrossan described. “Well, as far as

we know, you're the only person in the world who can say 'yes' to those three questions, so if you say yes then we just completed the tender process."

McCossan later said that the IDB viewed the pension reform in Peru as one of its most successful projects ever.

As an actuary, McCossan learned how to ask probing questions. "I knew nothing about South American social programs; what I knew was how to ask the questions and help the public servants think about possible answers," said McCossan. "We didn't design the solutions. We just helped them understand the underlying problems and design solutions to deal with them."

Professionally, from 1993 to 1996, he helped create the International Forum of Actuarial Associations (IFAA), which ultimately became the new International Actuarial Association (IAA).

McCossan's actuarial background later enabled him to develop risk management analysis and stress testing of countries' financial institutions for the International Monetary Fund (IMF) in 2006, in addition to successfully redesigning a Canadian province's pension regulation and its public service pension plans in 2010.

"Broadly defined, an actuary is a problem solver, and that's what I've been doing in the field of public policy."

STEVE VERNON, FSA, MAAA, worked in pension consulting for 31 years "doing what defined-benefit actuaries do ... actuarial valuations and consulting on plan design." After retiring at age 53, he used his actuarial skills to succeed in his second career—as a writer, publisher, retirement educator and researcher.

"For 20 years I studied how to be financially secure in an age of longevity ... and I came across research that showed if you keep working in your later years ... you're engaged in life and

that's important to your health and longevity. I decided to do something new."

Vernon used his actuarial experience to become a writer—in a way that you might not expect.

"The hardest part about breaking into nontraditional writing was getting published in the first place," Vernon said. He wrote his first book, *Don't Work Forever*, in 1995 but did not get a bite from a publisher. Instead, one publisher approached him to write a technical book on actuarial valuation and benefit programs. After his technical book was published, he recirculated the original proposal for *Don't Work Forever* and received two offers. By writing the technical actuarial book, he had established credibility as an author.

Vernon has published three more books and even formed his own publishing company, which also holds retirement workshops for people preparing for retirement. Today, he combines his actuarial knowledge with behavioral economics as a research scholar at the Stanford Center on Longevity, studying how the public can use personal savings to generate retirement income and how much money someone needs to retire successfully.

"It's commonly assumed that people make logical decisions, but behavioral economics tells us that emotions often override logic. So how do you design financial products or benefit plans knowing about this phenomenon?" asked Vernon. "Most working in behavioral economics are psychologists, social scientists or economists. They're smart in their field, but they don't have the depth in life contingencies that actuaries have, particularly in retirement plans."

Vernon is also a columnist for *CBS MoneyWatch*. In his column, "Money for Life," he shares the results of his research at the Stanford Center on Longevity. "The interaction with



STEVE
VERNON,
FSA, MAAA

**FROM ACTUARY TO ...
WRITER AND
RESEARCHER**

readers and employees who attend my retirement planning workshops informs my research. I get to hear directly what is on people's minds and understand where they are coming from." Vernon views the transition to writing and researching as a great personal achievement.

"I'm now age 62 and I'm just trying to help people, and in the process, make enough money to cover my living expenses so I can delay tapping my retirement resources until age 70. It's fun to be able to do things for pure societal motives. When you're in your 50s or 60s, if you're in the financial position to be able to make less money and just help society, then that feels good, and it has been invigorating to try something new."

PAULINE REIMER, ASA, MAAA, knows that as actuaries, we don't usually mind explaining to people what it is we do. When you are looking for

a new position or career, however, spending the bulk of your time defining what actuarial work entails to a recruiter is probably not an efficient use of your time or energy. After experiencing this problem, Reimer came up with a solution.

“While working as an actuary, I often received calls from actuarial recruiters, some of whom truly did not even know what an actuary did,” said Reimer. “I realized that the profession had many talented actuaries, but few knowledgeable recruiters to represent them. It became obvious to me that my skills were needed more as an actuarial recruiter than as a traditional actuary.”

While Reimer’s earlier actuarial career included stints at a pension consulting firm and two life insurance companies, she is now managing director for an executive search firm, Pryor Associates.

“It was actually really easy to transition to this field,” said Reimer. “The only irony is the number of hours that it entails. I thought I would work two or three days a week, and then it turns out you can’t be a good recruiter part time. You have to be on call all the time, and now I literally work over 80 hours each week, every week.”

Although she didn’t get the part-time experience she was seeking after having her first child, the change of career was ultimately gratifying. Reimer added: “It’s so rewarding to feel I play a role in helping actuaries obtain jobs. Most recruiters are happy when people keep changing employers. I get a thrill when somebody stays in a job and becomes successful in that role. That makes me very proud.”

Reimer is now involved with the actuarial field more than ever. As a recruiter, “you’re involved in hundreds of lines of business and multiple types of companies. I love that I deal with insurance, reinsurance, brokers, consultants, banks and hedge funds.”



PAULINE
REIMER,
ASA, MAAA

**FROM ACTUARY TO ...
RECRUITER**

She has placed actuaries in careers in life, annuity, health, pension, and property and casualty (P&C)—and in all functionalities including pricing, reserving, enterprise risk management (ERM), predictive modeling and catastrophe modeling. Reimer holds numerous leadership roles in various actuarial societies, and serves on advisory boards for the actuarial science programs at two universities.

Reimer’s unique role in the recruiting industry is best described by her tagline, “It Takes One to Know One ... An Actuary Placing Actuaries.” It is this philosophy, she says, that has contributed to so much of her professional success.

“I wasn’t looking to change out of the actuarial profession—I just thought I wanted a part-time actuarial job. I still feel like I’m in the industry, just from a different perspective ... I really don’t want to do anything else because I simply love working with actuaries in this capacity.”

STEVE MIRANTE, FSA, FCA, MAAA, had a unique start to his actuarial career. He had just started a Ph.D. program in physical inorganic chemistry at Columbia University when he decided to pursue a career in actuarial science.

Fast-forward 20 years, and Mirante had a unique end to his actuarial career. He is now head of human resources (HR) for a major telecommunications company, overseeing all HR operations within the company including compensation, benefits, HR information systems, equity administration and HR generalist operations.

Mirante built his career in the traditional defined-benefit actuarial consulting space, advancing his career while working for several consulting and insurance companies. When a former actuarial client asked if he would consider coming to the corporate side to learn about compensation



STEVE MIRANTE,
FSA, FCA, MAAA

**FROM ACTUARY TO ...
HEAD OF HUMAN
RESOURCES**

and executive compensation, Mirante accepted the challenge to expand his skill set.

“What’s nice about working on the company side is you address issues from start to finish,” said Mirante. “It is not just a technical issue and you walk away. You have to look at the people implications, the communication plan, as well as any systems or processes that support it.”

Because of the nature of his work, Mirante could not share many details about his current HR leadership role, but he could share his experience and provide advice for other actuaries who may wish to continue to grow beyond the traditional actuarial space.

“I started in a very narrow space (pensions), so I tried to expand those skills. I felt I had a good sense of working with people, leading people, running teams, and just tried to do that in an ever-expanding environment,” Mirante said. “It’s really good to be a mile deep in something, but you also need to be able to apply it horizontally. It’s good to have deep functional expertise but you need to try new things. Learn across new areas, and don’t be afraid to expand what you do.”

Looking back to his actuarial education and certification as an FSA, Mirante reflected on how his actuarial skills apply to work he is doing today.

“I’m not doing IRS tax forms anymore, but I’m using the skill sets in a different context. There aren’t too many heads of HR that are FSAs,” said Mirante. “The benefit for me is the analytical and the math skills directly have an impact on understanding the compensation and benefit programs. The applications come in all of the experiences that you have, and what you choose to do with it.”

DAVE SNELL, ASA, MAAA, managed actuarial technology in a reinsurance firm until retiring in 2007. However, he did not let retirement prevent him from continuing to innovate in his field.

Snell’s LinkedIn profile reads, “I recommend or invent technology tools that enable automation of tasks that otherwise would impede the progress of actuaries and other financial professionals.”

His technological advancements help bridge the gap between underwriters, actuaries and information technology (IT) professionals. “The IT department often views actuaries as wild cards with bad data security practices, and actuaries sometimes become frustrated with long turnaround times for requests,” said Snell.

Snell’s involvement with complexity sciences—a branch of mathematics that investigates how relationships between parts give rise to the collective behaviors of a system—led to a project that revolutionizes data collection and the utilization of data in life insurance underwriting.

“The project takes information from e-medical records, credit scores and prescription histories to assist risk assessment, but it’s a large volume of data for someone to assimilate into an assessment strategy,” explained Snell. He discovered a way to incorporate machine-learning techniques to accumulate the information most relevant to longevity. The algorithm will “identify what is and is not important to underwriters” to maximize efficiency and quality.

Besides pushing the boundaries to innovate beyond the traditional actuarial IT role, Snell has continued to push his own capability. As a young actuary, Snell did not foresee himself learning Chinese, but while working in Taiwan, he realized that not knowing Chinese



DAVE SNELL, ASA, MAAA

**FROM ACTUARY TO ...
IT PROFESSIONAL**

prevented him from easily completing simple office tasks, such as using the fax machine or the copier. He began learning Mandarin at the age of 50, as a hobby. Snell claims that although Chinese characters are difficult to learn, “they fall into groupings and I can often piece together their meaning,” which he attributes to the analytical mind of an actuary.

“Thirty years ago, I never imagined Mandarin would be useful to me as an actuary,” said Snell. He added that exploring your hobbies is a simple way to remain innovative and can be instrumental in your future success. ■

Jeffrey A. Bird is an actuarial associate with Prudential Group Insurance in Roseland, New Jersey.

Jeffrey.Bird@Prudential.com