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# An Actuary Looks at 50

By Greg Fann

*Editor’s note: Section member Greg Fann writes about his mid-career personal and professional reflections, paralleling the actuarial life experience with oceanic travel through the lyrics of the Jimmy Buffet ballad “A Pirate Looks at 40.” The article first appeared on <https://axenehp.com/actuary-looks-50/> and is reprinted with permission here.*

It’s been 26 years since I began my daily routine of putting on a tie (really), driving a few miles, walking across a muggy south Florida parking lot to an airport-facing building, and calculating benefit relativities on a Quattro (really) spreadsheet. I was young, ambitious, and excited about my chosen occupation.

I spent just a few years in Miami, but it was a great place to begin an actuarial career. With some introspection, I don’t think the tropical culture and musings of laid-back characters like Jimmy Buffett ever left me. His song “A Pirate Looks at 40” exposes the lamentations of a man looking back on his life, pondering how he was born in the wrong era to truly maximize his vocational calling, and thinking about how new circumstances impact his future. I turned 50 earlier this year, and I have reflected on my career, my profession, the rapid changes among us, and what I can offer to those who follow me.

## DREAMS OF SAILING

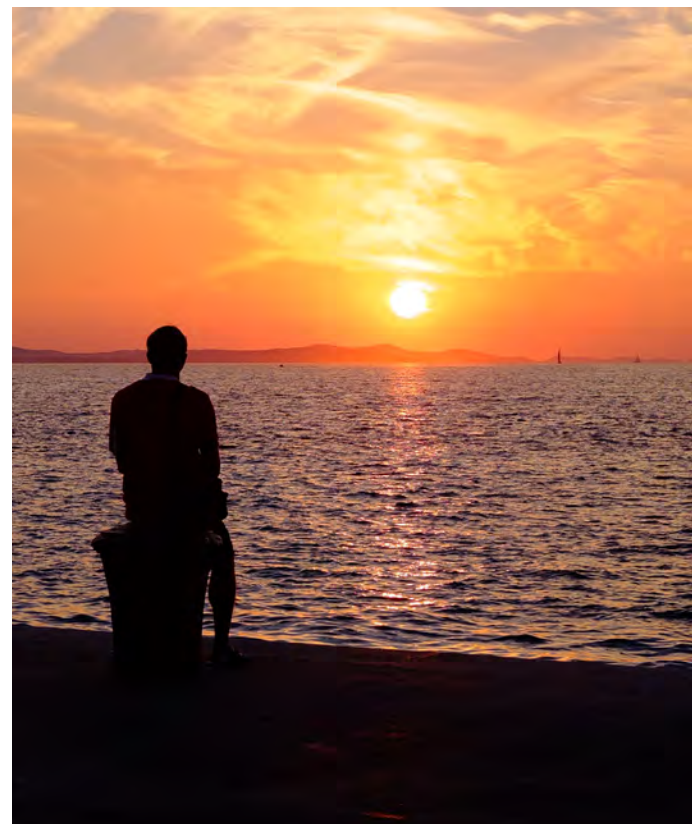
When did you decide to become an actuary? I was more than three feet tall, but young enough to consider it good fortune to learn about the profession at an early age. Many of my contemporaries share a similar story “I was good at math and my parents knew an actuary who ....”

For the actuarial leaders of tomorrow, that familiar story is diverging. As our profession becomes more global and more diverse, many new candidates do not have a personal connection with a practicing actuary. The Society of Actuaries (SOA) has

learned through research that many qualified candidates are not familiar with the actuarial profession until it’s too late. Financial and time challenges are demanding with the rigorous examination requirements, and some population groups are consequently underrepresented in our membership.

Marketing campaigns are underway to reach people where communication barriers exist, but we should all be mindful of the opportunity to contribute here. What do you say when people ask you what you do? Depending on the environment and perhaps some rough assessment of the questioners’ authentic interest, I have a few different answers. I’m not trying to be secretive and I would not suggest that any of us have hidden opportunities from potential candidates, but there are macro implications.

You have probably noticed that it’s easier for society to speak of us in general terms as well. A recent article in a major newspaper noted some good work performed by actuaries at the Centers for Medicare and Medicaid Services and referred to them as “government economists.” With an even larger audience,



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a current Society Of Actuaries Board Member was listed as a “financial analyst” rather than an actuary on a popular reality show. I understand the appeal of transparency, and “actuary” may be an unfamiliar term for many members of the media as well as the intended audience.

However, we need to work to champion our profession publicly and highlight the meaningful work that we do. We know that millennials are attracted to careers where they can visualize the societal benefit of their work. Hearing about actuarial work in the public sphere communicates societal impact much better than a short encounter with an actuarial analyst and a human resources representative in a corner booth at a career fair.

Our profession will be strengthened by early and impactful communication to qualified candidates, informing them of who we are and what we do while they still have time to appropriately give the actuarial profession fair consideration. The [SOA Strategic Plan](#) notes that our credentials are “prestigious, relevant, and globally recognized.” Our societal impact will be augmented, and the value of our credentials will be enhanced by leveraging opportunities to increase positive awareness of our profession to a larger talent pool of candidates. The actuarial profession will grow stronger as more people learn of the opportunities to “sail upon our waters.”

### A SAILS TO STEAM TRANSITION

Who do you think are the legendary sailors in our profession? Admit it ... you have some in mind. Even non-actuary presidential candidates have been rumored to have composed such a [list](#). In all seriousness, would our predecessors’ careers have taken a different path in today’s technological environment? It’s often asked how legendary basketball players would play today with a three-point shot added to the rule book; it’s interesting to consider how much of our work is driven by our personal skill sets versus the business and technological environment that we live and work in.

We are familiar with continuous change, but the degree of change is larger now. The technological world is rapidly altering the business environment, and we are amidst a “sails to steam” transformation. Likewise, the work we do and the expectations of us are changing. A “sails to steam” shift is a journey we will all embark on, perhaps at significantly varying speeds. The change will ultimately be to our benefit, but it’s noisy and less peaceful.

Change does not require that we neglect the past. Our profession has a [rich tradition](#) worthy of exploration. I conducted and wrote about my own personal [examination](#) in 2016. With concerns about the long-term sustainability of Affordable Care Act (ACA) markets mounting, I read through the Actuarial Standards of Practice (ASOPs) with this question in mind: “If separate groups of bright, experienced actuaries had been through the same year-long experience (I had just served on an ASOP task force) that I went through 50 times (and we had the benefit of their work), does our body of knowledge include any foretelling indications of what we might have expected with the ACA?”

This probing led me all the way back to a 1957 treasure, *Selection of Risks*, by Pearce Shepherd and Andrew Webster. As surely the old world meets the new, you can secure your own copy on [Ebay](#). The early principle of appropriate risk classification lives today in [ASOP No. 12](#) and reminds us of the danger of testing actuarial principles.

“Risk classification has been a fundamental part of actuarial practice since the beginning of the profession. The financial distress and inequity that can result from ignoring the impact of differences in risk characteristics [were] dramatically illustrated by the failure of the 19th century assessment societies, where life insurance was provided at rates that disregarded age. Failure to adhere to actuarial principles regarding risk classification for voluntary coverages can result in underutilization of the financial or personal security system by, and thus lack of coverage for, lower risk individuals, and can result in coverage at insufficient rates for higher risk individuals, which threatens the viability of the entire system.”

Actuaries have always been the trusted experts to measure and manage risk, and that will continue to be true. It is the hallmark of what we do. As competition from other Science, Technology, Engineering, and Math (STEM) professions grow, the need to highlight actuaries’ unique skill set and professionalism will become more acute. Our opportunities will grow as we adapt to new technology, refine our business acumen, and enhance our ability to communicate results. We should [dream big](#) as our roles expand.

### A CHANGING SEASCAPE

Many of us are familiar with the book *Who Moved My Cheese?* Our cheese is being moved, but it’s not disappearing. The scene that remains with me is when Hem didn’t want to leave a comfortable environment. “It’s dangerous out there,” he said. “No, it isn’t,” his colleague Haw argued. “We’ve run through many parts of the Maze before, and we can do it again.” Dejected, Hem’s reply was “I’m getting too old for that. And I’m afraid I’m not interested in getting lost and making a fool of myself.”

Our opportunities may be different in appearance and substance, and they may be more challenging to find. We may have to look harder, or more likely look through a different lens. The

world is changing and the work we do is consequently changing. Necessary change may be uncomfortable and require a risk of looking foolish. As a consultant with varied assignments, I like to live in two worlds. I often say I maintain a balanced mix of business—work I have repeated so much I can practically do while I’m sleeping and cutting-edge pioneering work that continually pushes the boundaries of innovation. The former provides stabilizing confidence while my professional [growth](#) has always occurred with the latter.

“Predictive analytics” is clearly the current innovative focus for actuaries across practice disciplines. It is much more than a buzz word. Predictive analytics has been strategically incorporated into basis actuarial education. Actuaries have begun using these techniques to transform big data into useful information to predict patterns.

An initial step of understanding the difference between predictive analytics and traditional inferential statistics is that predictive analytics is not concerned with the “why” behind correlation of inputs and outcomes. This lack of understanding causation may naturally trouble actuaries, who are accustomed to a reasoned understanding of relationships. In fact, [ASOP No. 12](#) showcases our ability to reason, even without supporting data: “Sometimes it is appropriate for the actuary to make inferences without specific demonstration.”

The new role of the actuary will not be to shelve prior techniques and adopt a predictive analytics mindset. Rather, it will be to lead the integration of predictive analytics with traditional methods to produce the best financial outcomes. Predictive analytics can lead to a better understanding of risk than traditional methods and foster consideration of new risk variables to consider while using traditional methods.

Actuaries working in predictive analytics and data science will add value that is not intrinsic in the training of other professionals. Through the examination process and career experience, actuaries are highly skilled in business knowledge, professional judgment and an understanding of the regulatory environment. Actuaries don’t blindly trust data; we exercise professional judgment and assure reasonableness. Actuarial standards do not require a direct causal relationship to be established, but public policy is often preferential to a commonly understood correlation. For example, financial credit scores may be correlated with mortality rates, but some jurisdictions may disallow usage of such determination as an underwriting factor. Through the nature of our work, actuaries are more familiar with the regulatory nature of insurance than other analytical professionals.

As data expands exponentially, our responsibility of managing data quality will only grow. [ASOP No. 23](#) provides guidance on the selection, review, and use of data, but also appropriate steps to take when relying on data from others. Data reliance

will become expanded as the pendulum swings more toward interpretation of data from compiling results. Robert Falzon, the vice chairman of Prudential Financial, [explains](#) the underwriting transformation from a time-consuming and resource-intensive process to needing “data scientists and actuaries that can do the modeling for me to create the artificial intelligence that can get [the process] down to the seven questions I really need to ask.” This transformation is one that will impact all actuaries, regardless of age or specific job function.

### A CROWDED OCEAN

When I was a senior in high school, the “Jobs Rated Almanac” ranked actuary as the [best job](#) based on six criteria: salary, stress, work environment, outlook, security and physical demands. This was encouraging to know and piqued interest in conversations from people who were not knowledgeable about actuarial work. Our profession has remained highly ranked in career studies, posting in the top four from 2009 to 2016 in the annual CareerCast analysis. However, “actuary” has been ranked 10 or 11 from 2017 to 2019, and the risk of drowning has increased with the competing fields of “data scientist,” “mathematician,” and “statistician,” which are consistently ranked higher.

Our occupation is “still around,” but we do have more challenges. Big data, advanced tools and predictive analytics continue to attract candidates with actuarial potential into other fields. Some actuaries’ responsibilities are growing and overlapping into pure data analytics fields. If we’re not performing that work ourselves, we will likely be interacting more with those who do. Our profession is not going away, but it is going to be different.

The work of actuaries has historically varied in terms of the depth and breadth. By necessity, actuaries at small companies without a large actuarial team are focused on breadth rather than depth. As resources are thin and all actuarial functions must be performed, there is often less opportunity to focus on deep analysis. In large companies, the attention of actuaries can be deeper with one team member focused on trend forecasting while another might run a reserve model through multiple scenarios. Some companies have “rotational programs” which allow breadth to occur over time. Consultants wear different hats, and often simultaneously perform depth and breadth work.

Each of these various paths have worked well for actuaries. I do not want to suggest that one has been better than the other, but the rapid changes among us will likely reward breadth over depth. These changes will require actuaries to be strategic thinkers and understand their business; expertise running a legacy model that will soon be outdated is of little promise.

As I was developing this article, I was also “campaigning” as a candidate for the SOA Board of Directors. In preparation, I gathered email addresses of actuaries I knew to remind them to vote in the upcoming election. Through the process, it occurred

to me that many of my contacts have pursued wildly divergent paths. It was invigorating to think about so many opportunities being pursued by people I know within a single profession. Some of these contacts are associates I see several times a year through conferences and volunteer activities. There are others I haven't seen in 10 or 20 years, but if we randomly met in an airport, we would talk as if it hadn't really been that long. Through some research, I was saddened (and a bit shocked) to learn that some of my contacts are no longer with us. This realization expanded the scope of my reflection.

As I "head uptown" (tell me if you know what JB really meant by that), I'm reminded of the overused cliché that life is short. As only an actuary would say, I want to optimize my remaining years. On a related life experience note, I had a near drowning incident in 2010. I was surfing alone in hurricane-induced waves on the Florida gulf coast. The unusual chop in the water caused the front of my surfboard to hit me in the head and immediately knocked me out. I was found unconscious sitting on the beach facing the ocean; I still don't know how I arrived in that position, but I believe in angels. I will spare you all of the painful details, but know this: it doesn't feel good to nearly drown. I spent a week in intensive care and a spirometer became my best friend after returning home. You have probably surmised that I am an adventurous type; with the exception of a major life [decision](#) in 2015, my fifth decade consisted of exciting but notably less risky activities.

Jimmy Buffett ends another song with the conclusion that a lack of laughter would drive us all crazy. I think that's accurate. We'll have ups and downs in different places, and we should laugh more. We should spend more time outside, put our phones away at times, and enjoy the company of friends and loved ones. Enjoy God's beautiful creation. Live. Love. And of course, laugh.

As I "look at 50," I think about priorities. I want to work hard to make the profession I love continue to be the source of trusted leaders in the new technical landscape. Personally, I want to take the necessary and perhaps uncomfortable steps to be sharp and relevant in a world designed for the generation that will follow me. I want to collectively return the profession to its rightful position in annual career rankings, and I want to do whatever it takes to be the best 50-something actuary I can be. More importantly, I want to enjoy life in my remaining years, have the appropriate perspective on the profession that has been so good to me, and do whatever it takes to be an even better person. ■



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