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Future Direction of the Profession: The Evolution of Big Tent

Track: General

Moderator: ROBERT L. BROWN

Summary: Don't miss this opportunity to share your thoughts about where the actuarial profession is now and where it is going. This special session is structured in a guided forum style, much like a town meeting, and led by SOA President Robert L. Brown. It is designed to cover issues vital to the proposed Strategic Plan of the SOA including actuarial education, examinations, value of the FSA and ASA, research, actuarial employers' needs, interaction with other actuarial bodies, and other critically important topics. Once completed, the strategic plan will guide SOA activities in these and many other areas.

MR. ROBERT L. BROWN: I'm currently President of the SOA. The role of the presidency is really a two-year role. You have some extensive defined duties in the President-elect year, and obvious defined duties in your presidential year. One of the historical reasons for the two-year role is it allows you enough time to start and finish an initiative. It is absolutely impossible to start from zero and finish anything in one year; however, the two-year process does allow you the chance to start and finish an initiative.

The Big Tent

Now I was fairly lucky, in a sense, because I was not only willing, but also very happy to fit into an initiative that had been started by Howard Bolnick, who was president two years before me. We already had an initiative that was on the ground and moving, and I was able to pick it up. The Howard Bolnick initiative became known as "The Big Tent." Those of you who haven't been involved in this process might ask, "What is the big tent and from where did Howard's concept come?" The answer to that question is, it is not a small tent. I always tell the actuarial clubs or the student audiences that I speak to about this and I believe that this answer now qualifies me as a consulting actuary because I've given you an answer that is 100% accurate and 100% useless.

The Small Tent

At the same time, I created the need for more work, because now I have to come back at \$400 an hour, and explain to you what the small tent is. So what is the

small tent? We've been around as an organization of professionals since 1889, which is approximately 112 years. In that time, we had only two major employers: head offices of life insurance companies and employee benefit pension consultant firms.

The small tent is effectively this dependence on two horses pulling our wagon. But we're worried about that in the future. Because of mergers, acquisitions, and convergences, there are not as many life companies, and in the U.S., we've really seen a strong decline in the number of defined-benefit pension plans. I know there's work in defined contributions, and there's certainly work in the cash-balance plans, but really we can't remain totally dependent on these two chief employers for continued growth and vitality. Besides, there is all kinds of really interesting work out there requiring actuarial expertise. We want to get out there. This really relates to the big tent concept. We want to invite candidates into a profession that does more than work for life companies and defined-benefit pension plans. The big tent includes many other fields of interest.

In the rest of the world, this same concept pervades the vision and strategic plans of every actuarial organization with which I've come in contact. They tend to call it wider fields, but it's exactly the same concept. In fact, I tell people that if you're going to have a bigger tent, then you're going to need a wider field. Right?

The New Reality

In the rest of my life, I am sometimes a university professor. I've seen quite a change in the environment for actuarial talent, and some of it is not totally positive. There's a lot more competition for my students. I am referring to math grads. In the U.S., there aren't as many full-blown actuarial science programs. At my university, students actually graduate with a degree in actuarial science. It's B math (actuarial science). They also take many actuarial science courses. The people who are recruiting on my campus are coming in and talking to my graduating students because of the skill set that they have. They have strong quantitative skills. They can do statistical modeling, and they're very comfortable with probability. They're also very comfortable with the mathematics of finance. They're being hired to become financial engineers or to go to Bay Street, the Wall Street equivalent in Canada. Some of them are going off to computer jobs, although, in some sense, it has been good news for us that the dot coms are not as attractive as they were 18 months ago.

These people are coming in and hiring my fourth-year students for exactly the skill set that I have given them, even though I helped them to have a skill set that I wanted them to use to be actuaries. Instead, they're going to become financial engineers, derivative creators, or option dealers, and they're not going to write any more actuarial exams.

Environment

The other thing that is happening is that the profession is rapidly becoming globalized. There are two forces, and it's not by chance that they're happening coincidentally; one is a reaction to the other. In the business world, we have globalization of jobs and job descriptions. People often work for companies that

have employees or subsidiaries all over the world. There's also the International Actuarial Association, which has really taken on strength in a very short period of time, which I don't think anyone would have predicted. It has really only been around in its new form for 10 years, yet it's doing really good work. One of the things that it's trying to do is create a global profession with a common set of standards, so that the word *actuary* will have a common definition anywhere in the world. Whether you're in Germany, Bangladesh, or Tasmania, you will know very specifically what it means and what the requirements are to be an actuary.

It's very natural to assume that the rest of the world uses whatever process you're used to. We know how we deliver health care in the U.S., and we guess that's the way everybody delivers health care. Well, guess what? The U.S. is almost unique in the world, in the way health care is delivered. The rest of the world has government-sponsored health care, almost as a Social Security type of program. Similarly, the way the SOA credentials its candidates is unique in the world. The rest of the world doesn't depend on a single route, requiring professionally designed exams. The rest of the world uses universities for a large part of the qualification process. In fact, you can sort of divide the world into three parts. There's North America, and I will label it SOA because I don't think there's anyone in the audience from the Casualty Actuarial Society (CAS) to get upset. (The CAS is also in North America.) In North America, the only way to become an actuary is to write all of the actuarial exams set by the profession. That's the only way.

The rest of the English-speaking actuarial world (Britain, Scotland, Ireland, Australia, and New Zealand) also has a full set of actuarial exams designed and defined by the profession, but if you take university courses, you can get waivers and exemptions for a large portion of the syllabus. It's a mix of university and professional exams. In most of the rest of the non-English speaking world, such as continental Europe and Mexico, you basically go to a university and get a degree (usually at the master's level in actuarial science), and then the government credentials you. The profession really has no say. They just start at the continuing education level.

We're the ones who are different from the rest of the world. I guess you can say the rest of the world is different from us, but I'm starting to think that we're the ones who are different from the rest of the world.

We're also signing mutual recognition agreements. We now have mutual recognition agreements with the British Institute, the Scottish Faculty, and the Australian Institute. That means that if an actuary who qualified in Edinburgh wants to come to Dallas and set up shop, he or she could become a full-blown Fellow of the SOA in a very short period of time and with very limited requirements (basically by doing the professional development (PD) cycle and the Fellowship Admissions Course (FAC)). They have their fellowship back home, and they can transport it. In the same way, if you go to Sydney, Australia, with a very limited amount of work to show that you understand the local content, you can become a Fellow of the Institute of Actuaries of Australia because of your fellowship in the SOA. There is mutual recognition.

Think about what that means. We will have future Fellows of the SOA who have attained their credentials with exemptions from Heriot-Watt University in Edinburgh City University in London, or Macquarie University in Sydney, and they will be Fellows of the Society. But there will be no Fellows of the Society allowed to get any waivers for courses at the University of Wisconsin, the University of Texas at Austin, or the University of Connecticut. There's a logical disconnect there.

Strategic Plan

That's a little bit of background on some of the things that motivated me as I came into my planning process. Now I'm going to divert to a slightly different, but totally interconnected, focus. In December 2000, we pulled together about 25 people, including actuaries from overseas, representatives of the CAS, non-actuaries, and some of our senior staff from the SOA Schaumburg office. We sat down for a four-day intensive retreat to look at a new strategic plan for the SOA. Here are some of the things that we came up with.

Environment

We looked at the environment, and we outlined these points. Our industries are globalizing. We have to react to the fact that there are now international forces coming into play, such as the International Accounting Standards and the General Agreement on Trade and Services (GATS). We have financial service convergence, so that banks, investment houses, and insurance companies are now living under one corporate roof. We have to make sure that actuaries can operate in that environment. As I pointed out earlier, we have a lot of competition now from other professions, like financial engineers, certified financial analysts, and epidemiologists. I think this is really a continuing issue. We have always had a bit of an image problem and a lack of public awareness. When you ask people what an actuary is or what an actuary does, they just don't know.

I've got a slightly humorous anecdote about that. We give out a gold medal every year at our university to the student with the top marks. It's sponsored by a large consulting firm in Canada, and the managing partner always presents the medal. We were there one June to make the presentation, and the managing partner was telling a light story about the fact that actuaries don't have a huge public awareness identity. He said, "One of the things I do when I'm out of town and I'm going from the airport to the hotel, is ask the cab driver about the level of knowledge that he or she has about the actuarial profession. My tip to the cab driver will depend on how good the answer is." Our fourth-year student immediately said, "Yes, and it keeps your tips down too, doesn't it?" We actuaries have a problem that we're not well known.

Now regulation was identified as an important element in our environment. Historically, regulations have been pretty good to us. We can't complain too much about things like ERISA. We don't necessarily get invited to the discussions when a new regulation is drafted; however, we believe it would be in our best interest, but more importantly, it would be in the public's best interest, if there was actuarial involvement in the drafting of regulations. We have to be cognizant of the fact that we need to have close ties to the regulators, so that we are participants in the design and promulgation of the regulations.

There are some very obvious social and demographic issues. Population aging is a huge actuarial opportunity. There are two big questions in the U.S. First, should you have individual accounts within Social Security? How much privatization is good for Social Security? What's the optimal result? Second, can you afford to cover prescription drugs for the elderly? Those are both actuarial questions. How many actuaries are on Bush's panel to decide the level of individual accounts in the new OASDI program? None. How many actuaries do you think will be invited directly to the White House discussions about whether prescription drugs should be covered by Medicare? I believe I know the answer. It will probably be very close to zero, within an epsilon in the neighborhood of zero. We have to work a lot harder to get involved. Again, these are huge opportunities for actuaries, and we have to remain cognizant of them.

We also believe there are a lot of new chances for us to inform and educate through Internet opportunities.

Strategic Initiatives

Having identified that as our environment, we then pulled together about a dozen strategic initiatives. They're under different headings. Here's strategy number 1: increase awareness of the value that actuaries add, and stimulate the demand for actuaries. I don't think anybody is going to oppose that. It is something we have to continue to work hard at. It will probably mean building partnerships with the American Academy in the U.S., the Canadian Institute in Canada, and other actuarial bodies around the world.

Another issue is advancing the profession's marketplace relevance. One of the strategies is to offer certification of a variety of accomplishments, so in the future, we might have more than two designations: ASA, at its new advanced level, and FSA. We think there are opportunities for other certificates. In Britain, they have something called a Diploma in Actuarial Techniques (DAT). There are nonactuaries that have this diploma that do really good technical work but don't go on to become FSAs. They also have a certificate in investments, which is really a high-level, sophisticated course in derivatives, calls, puts, and options. This can be a post-Fellowship certificate for actuaries, but there are also non-actuaries who have this certificate and work for investment houses, and they value the certificate. We think there are opportunities for more than just the ASA/FSA designations, especially in nontraditional employment. You'll see the theme of the big tent, through all of this. Can you see how this is consistent with the philosophy of the big tent?

To advance the profession, we're still trying to attract more of the creative types into the selection process. We've always done fairly well in getting the number of technical candidates that we need. We believe we also need more of the truly creative people. Another strategy is to actively encourage development of new fields of practice (big tent, wider fields).

The next area is under the subset of knowledge management. The strategy is to define a core skill set that provides current tools for the modeling and management of the economic consequences of contingent events. You might say, "Hey, that's the

definition of an actuary." But guess what? There are other people who define themselves with this sentence. There are financial engineers who could use that sentence. There are some accountants who are now getting into contingent events in evaluations. There are Certified Financial Analysts. There are members of the Global Association of Risk Professionals who could use this sentence to describe themselves.

We want to pull together this core skill set that is common to all of those areas of practice, and provide certification and membership in the SOA for those who can demonstrate that they have that skill set. That skill set is common around the world. There's nothing that's different about probability in Dallas versus Melbourne, Australia. I gave this talk two weeks ago on the Gold Coast of Australia at its biannual meeting, and I said there might be a slight difference in probability in that when we flip a coin in the U.S. It might land on heads, and if you flip the same coin exactly the same way in Australia, it might actually land on tails. But the probability distribution is still the same. It's still 50/50.

The other thing is that this core skill set can all be done as undergraduate courses at universities and colleges. Because this can all be done at the undergraduate level, it invites alternative routes. It invites us to do things like what has been done in Britain, Scotland, and Australia for a long time now. It invites us to become more like the rest of the actuarial world, in having alternatives to the single, professionally set exam syllabus.

As for knowledge management: identify and execute a research strategy that advances the current state and anticipates the future state of practice. Again, have the data analysis and studies available for nontraditional actuaries without giving up anything that we're doing today.

Promote life-long, continuing education to all members. We actually have a task force now looking at whether continuing professional development should be mandatory as it is for EAs and many of the other subsets of the actuarial profession.

Organizational effectiveness. We want to build a customer-driven business model, and we want to define and satisfy what the customer wants, needs, and desires. Create a new structure that uses the SOA Sections and the strengths of those Sections, and then link the Sections to the governing body. If you haven't been involved with the governance of the Society, this may be news to you, but we have a powerful amount of energy in the Sections. They're wonderful, and they're at the grass roots level. But there's a total disconnect between the Board of Governors and the Sections. We really do not talk to each other. There's nothing built in the structure that creates communication, one to the other. This new structure would link Sections with common interests. We would give a better definition of what it is we expect of the Sections, and what we want them to do. It requires better communication. Of course, as time goes along, we'll want to add Sections, and sometimes we might want to delete Sections.

We're in the process now of adding a new Section, and I think it's a very exciting

one. It's going to be a new small pension practitioner Section. This will be a new Section for sole practitioners or small pension consultant houses.

FROM THE FLOOR: Just a quick question. Who are the customers?

MR. BROWN: You are a customer in this area. Now we have other customers. We have employers who are customers. We have students and prospective actuaries who are customers.

Continuing with the organizational effectiveness: provide regular communication to our membership. We have the availability of electronic communication now and the ability to connect members. Again, we can do this very easily and electronically. Chat rooms and electronic sections and those sorts of possibilities now exist.

Governance, Management & Leadership

Another strategy is to change the organizational culture of the Society to one of more collaboration, clearer communication, increased dialogue, strategic continuity, and organizational effectiveness.

Build stronger partnerships between volunteers and staff. Historically, the volunteers sort of drove the strategy and staff responded to the volunteers, but in very much a response mode. A volunteer would phone Schaumburg headquarters and say, "I need A, B, and C by Thursday," and somebody would say, "Yes."

It's not the way it's going to be in the future. Now, we're going to keep the volunteers at the strategic level, and they will become subject matter experts. The staff will execute, but we will operate as peers. I might phone up the Schaumburg office on a Monday and say, "Quick, do A, B, and C." The response might be, "I can do A, B, and C, but do you understand then that D, E, and F are going to have to wait for two weeks? I thought that was our priority. Rob, maybe you could wait, and I'll get back to you a week from Tuesday." That's the sort of thing that's going to happen. Staff will be peers in the execution process.

The other thing in the organizational change is that we have moved the strategic plan out of the purview of the President-Elect and President, where it was housed in the organizational chart, into the full Board of Governors. So this strategic plan has been approved by the Board of Governors, and it has been our strategic plan for more than 12 months now. It'll get changed slowly. Historically, each President-Elect could define a new strategic plan. That's no longer going to be true. There will be a Society strategic plan set by the Board of Governors, and the President-Elect will fit into that.

The next sub-area is to build a professional community. This is a very important one. Change the philosophical culture of the organization so that the strength of the actuarial profession is more important than the strength of the SOA to try to lead to actuarial profession unification or at least operational unity. This is not necessarily unification in a corporate merger sense; it is professional unity.

You know there are five actuarial bodies in the U.S.: the SOA, the CAS, the

American Academy of Actuaries (AAA), the American Society of Pension Actuaries (ASPA), and the Conference of Consulting Actuaries (CCA). There is a lack of awareness of what an actuary is, but if people should go to the trouble of finding out what an actuary is, and need an actuary, or want an actuary for a public policy task force, then they don't even know who to call after that. Not only that, but we're competing between and amongst ourselves for a very small group of people. For example, we are holding this Dallas meeting at the same time that the CCA has a meeting for people who are working as expert witnesses. Now why should you have to choose between going to the CCA meeting on expert witnesses and the Society Spring Meeting in Dallas? Why aren't we getting our act together? We can't afford to use our limited resources in this ineffective and inefficient manner.

Historically, when the Society held a forum and said, "Let's talk about being more unified," people thought that the SOA wanted to take over. Every once in a while, they were right. What we're saying now is that the strength of the actuarial profession is more important than the strength of the SOA. We now walk into a room and say, "Let's talk about working in a more unified manner." If this means the Society gets out of a certain business, that's fine. If it's going to be more effective for the CCA to do it, then let the CCA do it. We're not here worrying about the size of our kingdom. We're here worrying about effectiveness and efficiency for the profession.

Let's actively work to build an effective global actuarial community, supporting the needs of members, regulators, and students. This means that the Society has committed itself to an active role in the International Actuarial Association, and the committees of that association.

Now just so you know, we put all this together in an organizational chart that tells us what we're going to do and when we're going to do it. The foundational part here is financial; we have to comply with our financial policies. We can't do anything until we know that we have a budget. One of the things that we're going to do first is build effective staff-volunteer partnerships. Then we'll improve performance by transforming organizational culture. If we do a really good job, some day we'll see that we have broadened and strengthened the actuarial profession. That's our goal. If you want to say it in one sentence, our goal is to broaden and strengthen the entire profession. It is completely consistent with the big tent concept.

Y2000 Strategic Plan

I want to go back to my own agenda because I was sort of the last President-elect who was allowed to set an agenda and have a strategic plan. A year-and-a-half ago, I started to look at my priorities and I chaired the strategic planning committee of the year 2000. We decided at our first meeting that we would not look at the future of the SOA; in fact, we decided that we would not look at the future of the actuarial profession. Using the word *actuary* immediately limited our scope. What we wanted to do was look at the future of a particular person — a professional with quantitative expertise and the ability to identify, model, and manage risk. Again, that's an actuary, but it's not just an actuary in today's definition. That could also pertain to a financial engineer, a member of the Global

Association of Risk Professionals, some Certified Financial Analysts (CFAs), or some accountants. What we wanted to do was identify with anyone who believed he or she was a professional with quantitative expertise and could identify, model and manage risk.

QRS Core

Then we sat down and we decided what the core skill set is that defines that person. For people who want to show us that they have that core skill set, let's give them a credential. The graphic that we came up with to portray this to audiences is a daisy with a core and many petals. The core skill set will lead to a credential that today we're calling Quantitative Risk Analyst (QRA). You will study for a core skill set made up of micro- and macroeconomics, some accounting, probability, statistics, statistical modeling, math and finance. Once you finish that core skill set, you receive a QRA credential. Then from there, you might go on and decide that all you want to do beyond that is earn your EA. You'll be a QRA/EA. That's a whole lot more attractive to many people than trying to become an ASA/EA under the new rules because ASA is way up there. We've lost some of those career ASAs, in the pension area. This would give them a new opportunity. I could be a QRA/EA, or I might become an FSA pension actuary. I might become a property and casualty actuary, life actuary, or health actuary. Maybe I'll go into Social Security and not go beyond QRA, so I'll do some demography, and I'll work in Social Security. I could go out and become a member of the Global Association of Risk Professionals, a CFA, or a financial engineer. The wonderful thing here is, I'll identify with actuaries. I'll have this credential given to me by the SOA, earned by me and evidenced by the SOA.

The other thing that we pointed out earlier is that this core skill set is international. It's exactly the same whether you're in Cincinnati or Sydney, Australia. What we're working on is a worldwide QRA syllabus. So our QRA syllabus committee now has representation from England, Scotland, Canada, the U.S., and Australia. We're working on a common syllabus for a common credential. I just think that's extremely exciting.

The third thing this does is it invites the possibility of some alternative routes to QRA. You don't have to have just one way (a set of professional exams) to become a QRA. All of the QRA skill set exists in undergraduate programs at many universities and not just actuarial science programs. You don't even have to be in an actuarial science program to get through the material for a QRA. Many programs offer economics, accounting, mathematics of finance, probability, statistics, and statistical modeling. Some of them are at the MBA level, but there are many programs like that. What we want to do is recognize the fact that you can be educated by educators. We want to give you a waiver from the professional exams.

Now if you go to Australia, you'll find that there are only four universities that have been granted waiver status. Each of these universities is reviewed regularly, and each of the courses is reviewed regularly by an actuary. The profession has tight control over the assessment of students who gain waivers. If you don't get the waiver, you can always write the existing professional exam. The same is true in Britain. They have about 12 universities in England and Scotland that are eligible

for any waivers at all. In the U.S., there are about 142 institutions that we believe would ask us for waiver status. If you take six courses times 142 universities, you'll have an unmanageable process.

The second thing is, we've had strong pushback on the idea of having accredited programs and leaving everybody else out. Many of you here did not go through an actuarial science program. You went to a liberal arts college and you appreciate, and should appreciate, your liberal arts background. You would not be allowed a chance at a waiver. If you went to a liberal arts college and took lots of economics, you should get the economics waiver. You don't have to go to Wisconsin, Michigan, or Georgia State to be eligible. That would be unfair in our minds. The philosophical way we're looking at waivers is that it's like applying to grad school. Actuarial science is going to be grad school. You apply to become an actuary. What you're really saying is, "I want to become a QRA."

One thing we've said is, there must be at least one professional exam for QRA. We're talking about having a modeling exam as the one absolute requirement that you must write.

If you can come in and show us that you've taken a lot of economics coursework, we won't care what book you read. We won't necessarily care about what chapters you've read. Anybody who has three courses in economics will know supply and demand, marginal price, and gross national product. If you've covered the topics that we want, we'll give you that waiver.

The same applies to probability. If you've taken a good solid probability course, we don't care if it was Hogg & Craig. We don't care if it was chapters 1-7 and sections 9.1 and 9.2. You know the way the Society syllabus reads. If you have a good solid grounding in probability, you'll get the probability waiver. In areas that you don't have a good solid grounding, you would be required by a graduate program to go back and maybe do another undergraduate course. We'd tell you to write the professional exam.

We believe that there will be about six courses in QRA. The maximum number of waivers would be five. Some students might get one and write five exams. Some students might get three and write three exams. Some students might get five and write the modeling exam. When you get the QRA, then you enter the traditional actuarial program at the life contingencies math level. There would still be at least five actuarial exams, very similar to the existing four, five, six, seven, and eight. There would still be a Professional Development (PD) cycle. There'd still be a Fellowship Admissions Course (FAC). Before you can get your Fellowship, you're going to have to write six actuarial exams: one for QRA, at an absolute minimum, and five for the remainder of your actuarial qualifications.

Why am I here today? I'm here to bring you up to date on what we're doing because we have a concern that we're not getting enough of the best candidates. This is in a period of time when demand is very hot. If you're trying to recruit, you know how difficult it is. I can tell you that at the University of Waterloo, in January of 2001, my students did not buy food or beer for the whole month of January.

They just went to receptions every night. Some nights they went to two receptions. Pizza and beer, Tillinghast. Pizza and beer, Mercer. That's how hot it is. There are now signing bonuses. We sound like testosterone-enhanced athletes. Come to us, there's a signing bonus of \$5,000.

One of my students came in and described his job, starting pay, and signing bonus, and I said, "It's a good thing I hadn't known about that, because I would have competed with you for that job!" They're making more in the currency translation in Canadian dollars than I am today.

But the other thing that I want you to know, clearly, is that we have not taken any specific action. We're still in the discussion mode, and if you want to talk about this, the strategic plan is on our SOA Web site. There are opportunities there for feedback. We have a President Chat Line located in the discussion forms on the SOA Web site. You can talk to me directly. What I'm looking for today, in fact, is dialogue. Let's now take some questions from the audience.

[Mr. Brown then polled the audience on three issues.]

Question one: On the whole, do you like the strategic plan? Do you feel comfortable with the strategic plan?

Question two: Do you like the idea of QRA? Do you feel comfortable with the idea, on the whole?

Question three: Do you think it's possible to have an alternative to the single track of professionally set exams to some level in the actuarial process?

Results show almost unanimous support for the strategic plan in answer to question one. This audience seems to be more strongly in favor of the strategic plan than what I've been getting from the clubs. But it's been about 90/10 at the clubs. That's 90% in favor and 10% opposed.

FROM THE FLOOR: I just wanted to make a comment. I came up through the academic statistical track. I have a Ph.D in statistics and 10 years ago, when I went to academic meetings, much like this one, I would hear almost the same conversation about statisticians not being known for what they do and people not calling on the statistician at all or at the appropriate time. Ten years later, I didn't hear that. The American Statistical Association (ASA) had similar strategic plans. I'm wondering if we have any kind of partnership with them and could talk to them about the plan they had at that time. I received similar reactions when I said I was a statistician. I'd hear, "What is that?" Now I do not get that kind of reaction. Their public awareness and demand have shot up and the field has widened in 10 years. I'm curious if it was something they did, or did the economy move that way? It might be worth a talk with the current ASA president.

MR. BROWN: Absolutely. We have not done that in the past. I live with the people who are in that organization in Canada, but I can't say that 10 years ago they did a strategic plan. We will get in touch with them to find out what they did and what

their measures of success and failure have been.

DR. HARRY H. PANJER: Actually, I just wanted to respond to your comment, because I'm also a statistician by background and a member of statistical organizations. The statistical profession is looking at some interesting issues right now. In Canada, in particular, they're looking at the certification process. They did so in the U.K. about 10 years ago. In some sense, they're using our model in terms of using a credential to assure that the quality of work that's done for their audiences is of a sufficiently high standard. That's really the motivation, but a derivative product of that is public recognition. If you create some credentialing process, then you will, over time, become recognized as a kind of brand. Their proposed credentialing process does not necessarily involve them taking specific examinations, but certifying that an appropriate educational background exists and appropriate experience requirements are met. That's the first step, of course.

MR. BROWN: That also allows me a nice segue. It is true that the countries like Mexico and continental Europe that have had a university process for qualification are now looking at some professionally sponsored exams. Germany and Mexico, in particular, are moving in that direction. I think the whole world is going to meet in the middle. That requires North America to move a bit. I think I see signs that Europe and Mexico are going to have some professionally sponsored exams that will be required, so we'll meet in the middle. It'll be nice.

FROM THE FLOOR: I agree with Professor Panjer. I should mention that during the Statistical Association's discussion of their strategic plan and expansion of their field, they recognized the SOA stature with the exam process and the respect that that brought to the process or to the potential employee. That's part of the reason it is considering some sort of credentials. Its demand increases so quickly, they now have had to deal with that issue kind of head on. That is because the employers will come back and say, "You've now convinced us we need a statistician, but this one can't do what we wanted him to do. How can we find one that can?" We don't have that hurdle. That's great. But I wonder if we can get a little bit of both? Can we get the wider recognition as well?

MR. RICHARD F. COYLE: One of the objectives of this is to stimulate the demand for actuaries. We'll obviously be interested in getting more actuaries involved in Wall Street, financial engineering, and so forth. Have you had discussions with any of those firms to see how they would receive this, and have you gotten input into the design of the program?

MR. BROWN: One of the initiatives we have on our plate right now is to meet with employers and develop a broad-based definition of the words, *traditional and nontraditional*. At present, all of the employers we're meeting with are actuaries. There have been employer breakfasts held during this meeting. The same thing will take place at the Toronto meeting. But we're not just stopping there. We're flying around interviewing employers. This is really an initiative that has been assigned to President-Elect Jim MacGinnitie and Deborah Bowen, our deputy executive director. It's on our radar screen. We're really working hard at it. It's something we probably have not done well in the past, but we're conscious of that.

MR. HARRY L. SUTTON: As a hobby, I'm on the faculty of the University of Minnesota. I've worked primarily with the health services research department. Even though I've studied at Michigan and went through the statistics exam by taking statistics there, I consider myself a numb nut as far as statistics is concerned. Essentially, I rely on the people in the health services research area. I'm in the health-care end of the business, but one of our best health service researchers was moved into the business area at the Carlson School of Management. I had been asked to give lectures to various people, and I've done some Ph.D candidates.

It would be great if they (the University of Minnesota) would have an actuarial track in the business school, because the guy in health care certainly knows about actuaries in health care. They had a gal who is not an actuary, but who is from United Healthcare, who is another senior fellow. She's essentially a data analysis person for a subsidiary of United Health Group. She's very smart and has run an HMO. There is a great deal of interest in health care. Of course, there's a lot of interest in investments and other things the MBAs go into. I don't know how you would get them to have courses or take exams. They're big in e-business. They've also asked me to be in programs on e-business and actually be an advisor to them on some kind of an e-health thing. I don't know what it is yet. An advanced model of the health risk adjuster is being developed. If they already have the data, the correlation is about 40% better, considering their evaluation of the same data that produced the ACG health risk adjuster system.

The United Health Group had all the same adjusters that Johns Hopkins had, except they grouped it together like the diagnosis-related group (DRG) system. They were placed together because the cost was about the same, but the causes were different. They just kept it all separate and even with the same data, they came out with a much better health risk adjuster that at least measures the predictability.

MR. BROWN: One of the things we did in our background research on QRA was we tried to identify programs that could lead a student through the QRA syllabus. Basically, all of the traditionally strong actuarial programs qualified. That was sort of easy. We have found at least a dozen undergraduate programs in the U.S. that would never be identified as actuarial science programs that, in fact, cover all of the QRA. They tend to call themselves Risk in Insurance, and they're really good programs for QRA, but they don't do actuarial science. We then also found about a dozen quantitative MBA programs that would satisfy QRA. They don't call themselves actuarial science, and they aren't actuarial science, but they would do QRA even though they wouldn't call it that. We've been in touch with them, too. We've told them, "You're two little bits short of a full QRA. If QRA became something with market value, would you add those two little courses or those extra bits of material? All of them agreed that that was a hurdle they would be able to get over. There was one place where we ran into perhaps a little bit of negative feedback. Most of these programs do not do compound interest theory the way we do it. They'll do corporate finance, and they'll show a student how to price a bond, how to price a stock, and how to do a mortgage, especially with the aid of a good financial calculator or a PC program. They don't do what is the inverse of S angle N

upper M, if you're left handed and working in a mirror.

We've now convinced ourselves, after much angst, that maybe we don't need to know how to do that either. Because personal computers are a reality, not too many actuaries spend a whole lot of time inverting S angle N upper M. You just change the interest rate to fit the period, and you have a simple annuity. We think that that's one place where we're going to change. I'm sure that some of our traditionalists would say, "Hey you're dumbing it down." You might feel that way, but students are still going to be able to figure out mortgage amortization schedules and bond formulas. They just won't be able to do an S angle N, upper M, standing on their head.

We've been in touch with these programs, and we're hoping that we're going to be able to expand in these areas. One model that I am hoping will grow, as a result of QRA, is what I continually refer to as the Old Michigan model. A student comes out of a liberal arts program, discovers the actuarial profession, and then enrolls in a master's degree program for 12-16 months (which I call the Old Michigan Program) and boom, just forges ahead. I think this would be excellent.

Now, the negative side. There are liberal arts requirements in most U.S. colleges. I truly appreciate that. It's remarkably different than Canada, but I truly appreciate it. If you sign up in 'Business', and you get all the 'Business' you need and all the liberal arts requirements you need, you can't get all the math you need. If you have a 'Business' registration, and the calculus chairs are full, the Math Department won't let the Business students in. The same thing is true if you register in Math. By the time you take all the math, statistics and your liberal arts requirements that you need to get your degree, you don't have room for all the Business we want you to take. If you're registered in math statistics, and the chairs in the Business course are full, you don't get in.

This is a problem, and we don't have a solution. We're talking to people and we're trying to convince them that they need to have these programs that bridge these two important areas. At the end of the day, maybe the result is still a liberal education. It is maybe not liberal arts but a liberal education.

FROM THE FLOOR: I have a number of questions and comments. First, is it the intent to get rid of the word *actuary* from the English language and to use *QRA*?

MR. BROWN: No, absolutely not.

FROM THE FLOOR: Is an actuary a higher level of QRA?

MR. BROWN: QRA is a prerequisite to the actuarial program.

FROM THE FLOOR: Then, is credentialing needed for one to be called an actuary, and practice, say, in the U.S.? Should that be up to the AAA or SOA?

MR. BROWN: The quick answer is we're still going to have something equivalent to Parts 4, 5, 6, 7, 8, Professional Development and the Fellowship Admissions

Course. The SOA will still exist as an education and research body. ASAs and FSAs will start out with QRA.

Then you go on in the same way that you do today to become a member of the American Academy or a Fellow of the Canadian Institute.

FROM THE FLOOR: I've seen the words, "We're seeking the best and the brightest." There are a number of people, and I consider myself one, that may not be the best or the brightest, but are really hard workers. Does anything like that ever count? Do we ever look for people who have some common sense? I know you mentioned the word *creativity* earlier, which I have never seen. Actuaries were number crunchers who had the pocket protectors and sat in the back of the room. They could never be brought out into the public. What kind of person are we really looking for? The AICPA says that it wants "the best and the brightest" but, I've worked with some accountants who I definitely think are not the best and brightest.

Lawyers and CPAs get paid relatively handsomely also. Maybe we have this thing about the Fellowship being a pie in the sky. Maybe it just takes too long to get there. That's one of my other comments. The people I've talked to say that travel time is something. I became an ASA in 1979. I'm not an FSA yet, and I've sat for Fellowship exams for 20 years. I've given up. It's not worth it anymore. I'd be willing to bet there are many EAs, and ASAs who have never ever sat for any other additional exams. I've sat for them all, but when the old syllabus was in effect. I was 85 credits shy, but that means nothing nowadays. I'm wondering if this big tent will really happen. Will the SOA take a long-term ASA or an EA who does the work that most actuaries have been doing for most of their lives? If you won't call us actuaries, or at least give us a voting right, then how is this big tent ever going to get off the ground? I think you're fooling yourself.

MR. BROWN: Let me respond. In another session, I got up and talked about this dichotomy and the problem that it creates. First, I'll say it isn't so much that we just want to attract the best and the brightest. We're concerned that we're losing many of the best and brightest that we used to attract. Maybe that's a better way to say it. We don't want to lose them.

There are definitely two ways you can look at the future actuary. One is that he or she is a very creative person who is capable of doing management communications presentations, who can do very sophisticated statistical modeling. Now that's one image of the future actuary. If anything, I would say that we are tending towards that image. If you want to be really frightened, try to read the new course 3 and course 4 syllabus, and find how many words you don't even recognize.

Second, there are a lot of jobs for really good technical quant type people. You're a traditional career ASA, and we don't want to lose these ASAs. When we raised the ASA hurdle, we lost some good people in the sense that we didn't get those future actuaries. We didn't lose you because we didn't take away your ASA, but we didn't get new ones who would be equivalent to you. So that was a loss. What I'm hoping is that a QRA will be manageable, attainable, and give you the membership that you want, so that the new career ASA may look like a QRA/EA. That would really be

a good set of credentials.

Maybe we shouldn't just be thinking of attracting the best and the brightest. Isn't that what I heard you say?

FROM THE FLOOR: First, every profession really has many different kinds of individuals. They identify themselves as having a particular image, but the profession itself can have all different kinds of people just as you were talking about. That raises the question of whether we really need the best and the brightest.

I think there are actuaries who are the best in many ways, but they might not be the brightest. I'm not sure that the brightest are always the best, when it comes to doing certain kinds of work. Who are we trying to attract? I think we still do lack a very definitive set of characteristics. They must have certain characteristics. You have to be proficient at mathematics and handling data, but you don't have to be a mathematician. A true mathematician really doesn't deal with the kind of work we do anyway. Perhaps we want to be a little more specific as to exactly what we're looking for.

FROM THE FLOOR: I want to actually address this last gentleman who was just talking. All of this has come about because we're trying to keep actuaries in the profession who have become discouraged with the traditional course. What really strikes me is this is a great offshoot. What I'm hearing from some of the members is that it's starting to get blurred almost as if this is going to take over from the traditional track. There are still so many opportunities for actuaries in traditional work. You don't have to be the best and brightest. A president of an insurance company once said to me, "There's a chair for every actuary." What he meant was that the skill set offers so much that you're not going to have a company of all the best and the brightest. Everybody has a different skill set that they bring.

FROM THE FLOOR: Just a little controversial thing here. You probably have a lot of FSAs in this room. How many FSAs would vote to let an ASA actually vote in your elections?

MR. BROWN: There seems to be a cycle on many agenda items. I think that particular motion (NA voting) comes to the board, approximately on a five-year cycle and to this date, it has always been defeated. But I think we're about 4.5 years out from the last time I saw it. We're just about ready to have that motion come before the board again.

FROM THE FLOOR: I'm working in a nontraditional employer-based environment, and I think a lot of this is good. To reiterate, so much of our nontraditional roles are very much focused on statistical modeling, and we're very much into that. I do some of that, but I'm a health actuary, and have no clue about all the detail the pensions go into or the financials or the derivatives. When I read a lot of these things, it kind of frightens me at times, because I'm a health actuary and I don't do that. I think I'm very good at what I do; that is, I look at the broad picture. I think we need to somehow include them in the vision. Oftentimes, when I read some of

the decision statements, because I'm a health actuary, I don't think that they pertain to the work I do. I think that that's something to be considered.

MR. BROWN: Absolutely. That's another area where we do have a lot of sensitivity. We get a lot of feedback from the health and pension actuaries who say that they don't believe that these definitions are designed for them. We also get the same feedback from the CAS because, as an academic, it would be wonderful if we didn't have two actuarial education and research bodies. I'm an ACAS. What was common in my exam background completely overwhelms what was different. But if we go to the CAS and say, "Why don't we strive to have much more in common?", this identity thing comes forth. We're working hard to make sure that we remain tuned into the health and pension actuaries.

I'll tell you where we run into some problems. I can show you SOA committee after committee for which we'll ask for volunteers, and we'll get four academics and six people from the life insurance industry. Then we have to start making phone calls to get somebody from the pension or health area.

I can show you the analysis of who participates in the elections of the SOA. Fifty percent of the life actuaries vote, and 20% of the pension and health actuaries vote. We've got a little bit of a self-fulfilling cycle here that causes you to feel disenfranchised. You have to come forward. We're working hard at it, and we're sensitive to it. It's awfully hard when you've got a committee of 15, in which 10 of the volunteers have life backgrounds, to not have two-thirds of the influence be in the direction of the life people.

FROM THE FLOOR: Besides volunteering and voting, what is it that you'd like the membership to do in terms of advancing this? Only the attendees of this session can appreciate just how sparse the attendance is here.

MR. BROWN: Yes, I'd like to see you encourage your colleagues to participate in the electronic communication that is available to them. Please go back and send an interoffice electronic memo saying, "You should go and read the strategic plan; it's on the Website." You should get on the chat line with Rob Brown. Let's keep this dialogue going. I've been to every club that would invite me. I've been to every university that would invite me and made this presentation, and now I'm inviting that feedback. I'm getting lots of it. All of it is constructive. Not all of it's friendly, but all of it is constructive. Just do whatever you can to get your colleagues to feed back into the process. One of the realities is my last meeting in which I have any level of influence with the Society is the middle of October. I'm going to have a couple of pretty big motions going before the Board of Governors in the middle of October. I'd like to hear from the membership, before that meeting, so that I don't have requests for a constitutional referendum after that meeting.

FROM THE FLOOR: The leadership tends to look way out into the future. How many of us attending this meeting are concerned about the future? In fact, I'm not sure if many people who aren't here are not very well satisfied with what they have. We hardly ever think about the future. Thirty percent of the people actually vote for the people in office. Most people would make a cynical remark about those

who were in office. Let them do whatever they want to do. The membership would just keep going. There's the whole idea of not allowing ASA voting and volunteers. It's largely the same number of faces. In the future we're going to get a lot of employers who don't really consider it worthwhile for the employees to participate. I don't really see much in the strategic initiative addressing that.

MR. BROWN: This topic came up in our discussion during our four-day retreat. This was a very big part and maybe it should have been written up specifically in the environment. It's tougher every day to get volunteers and volunteer hours. Employers are becoming stingier and stingier. The one place where this is addressed is the staff/volunteer relationship. We know the volunteers will be capable of doing less and less. That means we have to have staff and hire staff and demand more from staff. In return, we have to define what it is each one does. The strategic plan says that the volunteers will be the item experts and the strategic setters, but the staff will be peers, and they will work as equals and be involved with the implementation. Volunteer time is exponentially evaporating.