

**RECORD OF SOCIETY OF ACTUARIES
1995 VOL. 21 NO. 4B**

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

Moderator: HELEN GALT
Panelists: AIMEE JORDAN*
GODFREY PERROTT
Recorder: JOHN E. HANRAHAN

The panel will present an overview of current and future employment trends in each area of the profession.

MS. HELEN GALT: I'm a company actuary at Prudential. Now, what does that mean? That's one of those jobs that you define as you go along. I am the appointed actuary for the company, and I have actuarial oversight responsibility for all actuarial functions at the Prudential. I'm also in charge of Prudential's risk management unit. But I'm here primarily because of the role I try to play in promoting career development for actuaries at Prudential. Most of my remarks are going to be focused on how we've expanded the range of jobs actuaries fill at Prudential by emphasizing hiring and developing people with strong technical and nontechnical skills. I'm going to talk about the notion of the ideal actuary, and I want to emphasize right now that this presentation is not intended to be autobiographical.

Our second speaker is Aimee Jordan. Aimee is an executive vice president with Andover Research, a firm specializing in the placement of actuaries and benefit consultants. Aimee is in her tenth year at Andover, and she heads up the firm's insurance division. She received her master's degree from New York University in communications and a Bachelor of Science degree from the University of Rhode Island in education. Previously Aimee was in public relations with two firms. From her position at Andover, though, Aimee does have great perspective on what's going on in the insurance industry, in general, and the employment market for actuaries, in particular, and she's going to discuss those trends and give you some practical advice on how to market yourself.

Our third speaker is Godfrey Perrott. Godfrey has been a consulting actuary with Milliman & Robertson for the past 30 years, and he is currently located in the Boston office where he specializes in both life and health issues. Godfrey has been a member of the Board Task Force on Education, which has recently produced a report recommending substantial changes in the way actuaries are to be educated so that we are better prepared to meet the challenges of the future. Godfrey will talk about some of the skills that are emphasized in the Board report, and he'll also offer some personal perspectives on the profession that I hope that you will find both challenging and provocative. I think of Godfrey as the "Paul Revere" of this session. He's going to give us all a wake-up call.

Our recorder is John Hanrahan. John is from Prudential, and he's had a number of different assignments at Prudential. Currently, he's in the insurance systems area at Prudential working on many knotty administrative problems.

*Ms. Jordan, not a member of the sponsoring organizations, is an Associate at Andover Research Ltd. in New York City, NY.

We can't guarantee that you're going to walk away from this session with a formula for success, but we do hope that we'll give you some useful ideas that you can think about in planning your career.

I would like to start out by talking about some of the stereotypes associated with actuaries. One of the things that can limit your career development and your marketability is the set of images that other people have about members of our profession. Now, what are some of the positive images that people have about actuaries? Well, I think most people would characterize actuaries as being intelligent and technically proficient and hard-working and logical and persistent and ethical, and many other good adjectives, but there are some less positive images, too. There are some people who would say that we are too narrowly focused, overly technical, hard to understand, overly conservative, inflexible, maybe even a little dull. These same uninformed folks think that our communication style is consistent with this definition of an actuary:

a person who passes as an expert on the basis of prolific ability to produce an infinite variety of incomprehensible figures calculated with micrometric precision from the vaguest of assumptions based upon debatable evidence and inconclusive data derived by persons of doubtful reliability for the sole purpose of confusing an already hopelessly befuddled group of persons who never read statistics anyway.

One of the things we are going to talk about a great deal at this session is communications.

At Prudential, we have tried to develop actuaries who possess all of the positive qualities that I mentioned but who aren't going to get held back because they have too many of these less desirable traits. What we are looking for is the ideal actuary, a person who is a competent technician but who also has strong nontechnical skills and who is capable of becoming a broad-based business executive. That last point is very important because Prudential looks to the actuarial staff as a fertile source of candidates for senior management positions. So, how do we go about creating the ideal actuary?

First, we have to start with the ideal actuarial student candidate. Here's how we describe the candidate whom we are looking for in our recruiting brochure. We want exceptional individuals who have demonstrated superior academic performance, strong mathematical aptitude, initiative, motivation, creativity, flexibility, leadership ability, strong interpersonal skills, strong communication skills, and strong time management skills. In other words, we want it all.

We now want to develop business people who are actuaries, and, in fact, our student program is called the actuarial executive development program. Even if we start with excellent raw material, the technical and nontechnical skills that our candidates begin with must be developed further while they're taking their exams, and we do that in a number of ways.

First, we emphasize technical proficiency by having reasonably stringent requirements for passing exams. Second, we have a demanding series of job rotations that are planned to give each person increasing responsibility in a broad variety of assignments. Third, we track the development of nontechnical skills, oral and written communications, interpersonal skills, leadership, and so on. And, fourth, we do a great deal of

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

group and one-on-one coaching both formally and informally with the director of our program and other members of the actuarial staff who serve as advisors.

You may say, "I'm through with my exams. What relevance is any of this to me?" I think that it's very relevant because we should continue with the same kinds of thought processes about our technical and nontechnical skills long after attaining Fellowship. Tables 1 and 2 show a couple of competency grids. Basically we use these grids to track development of people before Fellowship, but you can use similar grids like this to assess your current skill set and to figure out what knowledge, experience, and skills you should try to develop in your next assignment. I think that a variation of these grids can be used at just about any stage of your career.

Table 1, which is very busy, shows technical competencies, and it's broken down into several major areas: product knowledge, financial analysis and reporting, systems, marketing support, and risk evaluation. The idea here is to look at each of your assignments (that's what the numbers are across the top), and use a grid like this to evaluate the depth and range of your current and past technical experience. Now, you might rate each area as a 1, 2 or 3, depending upon your level of expertise. Another way of using a grid like this is to evaluate a job that you're considering. Does it play to your strengths? Does it fill in background that you feel is critical to your future success?

Table 2 focuses on what we've called management competencies or general skills: oral communication, written communication, problem analysis, administration, interpersonal skills, leadership, and global perspective. Now, again, you can use a grid like this to evaluate the skills you've already developed and to identify those that you want to develop. The Society's Committee on Management and Personal Development has put together a set of grids like this that is oriented toward Fellows, and you might want to contact the Society to obtain a copy.

What do we actually do at Prudential to continue career development after Fellowship? Basically, we follow the same concepts that we use in our student program. First we actively encourage continuing technical education; that may take the form of sessions we run internally for the actuarial staff, attendance at Society meetings or seminars, participation on committees, or self-study. I would think most of the people at this session have a good idea of how to continue their technical education.

Second, we continue job rotations after Fellowship. A group of senior actuaries gets together periodically and reviews how long people have been in their current assignments; we think it's particularly important for new Fellows to get another job experience after, say, two years. For the more experienced staff we don't force individuals to move if they're very satisfied with their jobs, but most people are amenable to change after they've been in one place for a few years, and we encourage actuaries to consider both traditional actuarial assignments as well as less traditional roles.

Third, we encourage the continuing development of nontechnical skills. In a large company like Prudential there's a wealth of opportunity to obtain both formal and informal training, but if those opportunities aren't readily available at your workplace, there are many other ways to achieve the same objective, and I'll talk about that shortly. And, finally, we encourage networking among members of the actuarial staff through

RECORD, VOLUME 21

social get-togethers, education sessions, and what we call a contact point program. Fellows are given the name of a senior level actuary outside of their business unit who is available for informal career counseling.

TABLE 1
TECHNICAL COMPETENCIES

Competencies/Assignment #	#1	#2	#3	#4	#5	#6	#7
PRODUCT KNOWLEDGE							
Insurance Pricing							
Underwriting							
Investment Product Pricing							
New Product Development							
FINANCIAL ANALYSIS/REPORTING							
Reserves							
Valuations of Liabilities							
Expense Management							
Federal Income Taxes							
Budgeting							
SYSTEMS							
Specifications							
Programming							
Analysis							
PC Literacy (for example, 1-2-3)							
MARKETING							
Sales Illustrations							
Sales Promotion							
Research							
RISK EVALUATION							
Investment Risks							
Asset/Liability Matching							
Cash Flow Analysis							
Attributed Risk							
New Ventures							

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

TABLE 2
MANAGEMENT COMPETENCIES

Competencies/Assignment #	#1	#2	#3	#4	#5	#6	#7
ORAL COMMUNICATIONS							
One-on-one							
Meetings, Groups							
Formal Presentations							
WRITTEN COMMUNICATIONS							
Informal							
Technical							
Documentation							
Persuasive							
PROBLEM ANALYSIS							
Well-defined problems							
Obscure problems							
ADMINISTRATION							
Supervision							
Training and Development							
INTERPERSONAL							
Effective Relationships							
Negotiations							
Staff Motivation							
LEADERSHIP							
Project Management							
Decision Making							
Objective Setting							
GLOBAL PERSPECTIVE							
Understand Organization							
Business Unit/Subsidiary							

How successful has Prudential been in developing actuaries who are broad-based business executives? We used to be able to say that our chairperson of the board was an actuary, but he retired a year ago, but let me give you some idea of the kinds of positions actuaries currently hold. Seven actuaries are functioning as heads of business units or major product lines, including the man who heads up our 25,000-person group operation and another who runs our international insurance business unit. Another nine people are functioning in company actuary, business unit, chief actuary or chief financial officer roles. And we have many people who are in other less traditional assignments—a senior

executive in human resources, several actuaries in our risk management unit, a senior vice president in one of our investment areas, a specialist in health care policy, an actuary who's in charge of a major reengineering effort in one of our individual insurance business units, a senior systems executive, a vice president in charge of brokerage marketing and administration, and a person who helped start a new managed care operation in one of the southern states.

I'm now going to focus on a few ideas for developing some of the nontechnical skills that can make a big difference in your future success. One very important skill is oral and written communications. It's fairly obvious that you can be one of the brightest people in the world, but your ideas will go unrecognized and unfulfilled unless you're capable of communicating them effectively to other people. That means communicating with others who don't have the technical background to understand easily what you're talking about. That presents a particular challenge, I think, for actuaries.

How do you develop those skills? One way is to enroll yourself in formal training, a course on how to give more effective presentations or a writing course, but you also need to practice those skills by speaking and writing often and by seeking out honest feedback on how you're doing. Now, is it possible to develop interpersonal skills? You may not be able to change your personality, but you can train yourself to tune into other people and communicate with them more effectively. Many books and courses deal with the subject of basic personality types and the characteristics or traits that determine how different kinds of people will react to different ideas or situations. So, if you think the marketing people in your organization are all nuts, and you don't know how to get through to them, a little time spent on trying to understand how they are different from you (for example, in the way they view risk versus opportunity) can be time very well spent.

Another skill or attribute that every executive needs is knowledge of the company that he or she is working for. That means seizing every informal and formal opportunity to learn what each part of the organization does and how the pieces fit together. The more kinds of assignments you have, obviously, the more well-developed will be your understanding of the company. If you don't want to change assignments, you can do things like volunteer for task forces that will give you exposure to different people and different functions.

Understanding your company also means understanding the unwritten rules and values that determine how things get done. Sometimes that takes much careful observation, and a wise mentor can also tell you about these cultural norms. Perspective and judgment are related skills. Perspective is the ability to approach a problem with balance and objectivity, recognizing a broad array of internal and external considerations, and judgment is the ability to weigh alternatives and select the best solution to know where and when to invest resources and energy. Now, I don't think I've ever seen a formal training program on how to improve either of those skills, but you can develop them over time by understanding how the various parts of your company work, by educating yourself about the political and legal and regulatory environment in which you're operating, and by observing the problem-solving approaches of successful executives in your organization.

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

Is it possible to develop imagination? I believe that there are some individuals who are creative geniuses from very early in their lives whose imaginations are boundlessly fertile. I'm not sure how many of these people are attracted to actuarial work, but I do think that actuaries can develop the kind of imagination and inventiveness of Thomas Edison. Edison often tried thousands of experiments before one of his inventions actually worked. It often doesn't matter if you get to the goal line slogging along one yard at a time. The point is you still get there.

The final skill we should discuss is leadership. Here also, there are many formal training courses that can help you evaluate your leadership style, many of which rely on feedback from your peers and subordinates, but there are many opportunities to spread your wings even very early in your career by getting experience supervising other people, by volunteering to head a task force, even by chairing meetings. You might also think about the best boss you ever had and why you enjoyed working for him or her. When I think back over my past supervisors, one of them stands out simply because he set very clear objectives. It was up to me to figure out how to achieve those objectives, but at least I knew what he wanted.

The description of the ideal actuary that I've presented does have some embedded conflicts or downside risks. Question—can you maintain your technical edge and at the same time build strong, nontechnical skills? For example, let's assume that you want to improve your written communications. A one-day course on how to write better memos probably won't do it. You'll have to spend more time thinking about your target audience and how to approach those people before you even write an outline of what you intend to say. You'll have to spend more time organizing your thoughts and more time drafting and redrafting your work. Well, that may sound doable without sacrificing your technical proficiency, but now let's take the next step and assume that you want to broaden your company knowledge and business perspective. One way of doing that is to accept an assignment that draws on your technical strengths yet teaches you about a different aspect of the business.

Think about an assignment in marketing support or a job helping to build a new administrative system or an assignment in process reengineering or a job in the risk management unit of your company. All of those assignments can teach you about different aspects of the business without severing your contact with the technical aspects of the products and services your company offers.

What if your real goal is to expand your horizons beyond merely becoming chief actuary? You may be thinking about chief financial officer or chief investment officer or chief information systems officer or chairperson of the board. Obviously, those aspirations mean accepting assignments in areas that are well beyond traditional actuarial roles. It may be difficult, if not impossible, to learn the technical content of these assignments and keep up with your actuarial specialty. You'll also need to demonstrate that you can manage people and inspire people. Virtually all of the senior vice presidents at Prudential are in charge of big organization units with tens or hundreds or even thousands of people. Managing these organizations is a full-time job, and sitting on top of a big organization, almost by definition, removes you from the technical details of the work. I think it's very hard to qualify yourself for these kinds of positions and remain an actuary's actuary.

Another set of risks and opportunities arises from the changes that are taking place in the industry as a whole. I'm going to touch on this very lightly because Aimee will address the trends that she is seeing in the industry. We've certainly seen a wave of consolidations taking place, even among the biggest players, and in some cases companies are merging that complement each other's strategies and strengths. In other cases companies with similar markets and strategies are combining in order to achieve better economies of scale. It's hard to believe that this activity will create a quantum increase in the demands for actuaries. Other companies are rethinking their strategies and deciding to become niche players by zeroing in on one or more segments of the marketplace. If you're lucky, you'll be in the area targeted for growth. If you're unlucky, you may find yourself looking for another job. In general, competition from the rest of the financial services industry is increasing. Life sales are relatively flat. Annuities and other savings vehicles are seeing significant growth rates, but these are the areas where banks and mutual fund companies tend to present the greatest threats. So, the only certainty seems to be that the competitive landscape will continue to change.

I'd also like to comment on two other phenomena that I have seen at Prudential. The first is that we haven't been very good at predicting our demand for actuaries, and the management of your company may not be able to forecast their needs any more accurately than we have. We've had a little bit of difficulty trying to figure out how many people we need and in what areas. Right now we're fortunate in that we have a tremendous internal demand for actuarial talent in a number of areas, but with pressures on reducing expenses and rumors about reorganizations, this situation could change rapidly.

We have also seen an increasing use of actuarial consultants. In some cases we've had urgent demand for actuarial talent, and we haven't been able to spring loose the internal resources needed to meet the need. In other cases we've required a particular set of technical skills that we simply couldn't find in-house, and in some cases we've used actuarial talent as a way of benchmarking our internal practices and skills to what's leading edge in the industry. In all cases, of course, using outside resources helps convert fixed costs into variable costs, and that truth has implications for the relative number of job opportunities in insurance companies versus consulting firms. What's the basic message here? There will be more industry change and more career uncertainty ahead.

What conclusion would I draw about career opportunities for actuaries? I think that we should remind ourselves about the competitive advantages that we have to offer. First, we understand insurance liabilities better than anyone else. We understand how products are constructed, how they're priced, how they're repriced, what risks are embedded in those products, what makes them profitable or unprofitable. Second, we have the ability and the opportunity to learn about investments and finance through the syllabus of the Society as well as through our day-to-day work. It's been my experience so far that it's easier for us to learn about the asset side of the balance sheet than it is for many of the investment folks to learn about the liability side of the balance sheet. Third, actuaries tend to be good at building models and in choosing appropriate assumptions to put into those models. Now, we do have competition from MBAs here, but I think we can hold our own. Four, actuaries understand the nature of risk, whether it's insurance risk or asset risk or operating risk. We know what drives risk, and we know how to estimate the financial impact of risk. Actuaries, of course, are both creative and practical problem solvers, but that's not a unique talent unless you combine it with the other qualities I just listed. If you can continue to build on those unique technical competencies and at the

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

same time develop good skills in the areas of communications, company knowledge, perspective, imagination and leadership, then you will succeed in your company, or you will succeed elsewhere. I think the key is to develop balance and maintain your flexibility.

MS. AIMEE JORDAN: It is always interesting to hear about the job market and the opportunities in your profession, especially in today's economy. I will not be talking about specific opportunities but, rather, the current trends in each of the different areas of the profession. I will also give you some insights on how to market yourselves right now in your own companies and will conclude on how you can take a proactive role in creating more career opportunities, thus ensuring a more secure and rewarding future for yourselves. Let's start with the areas of the actuarial profession.

Consider pensions and investments. The investment banks are an area where we have seen increased activity over the years. These financial institutions continue to add investment oriented actuaries in their insurance groups, fixed income research areas, and derivative product lines. Some of the skills required are asset/liability management, modeling, pricing and product development of all types of guaranteed investment contracts (GICs) and annuities, and marketing capabilities. With regard to marketing capabilities, going out and marketing the bank's products and services to insurance companies to bring in new clients is not expected at the onset. What is expected, however, is the ability to communicate and work as a team presenting technical information to insurance executives. That's what's important.

Credit and rating agencies are also increasing the number of actuaries on their staff. Credit analysis firms and departments within fixed income investment advisory firms are including actuaries together with financial analysts to study the creditworthiness and relative financial strengths of carriers in the life insurance industry. Having an actuary on their staff lends increased credibility to this evaluation of life insurers for their clients.

Investment departments within insurance companies are also adding actuaries to their staff. Most of the time these new positions are filled by someone internally, given to someone who's shown an interest and has some asset/liability and modeling experience. Other insurance companies are hiring asset/liability specialists to spearhead this function in the corporate or investment department. Only a small number of companies have instituted these effective asset/liability functions. However, each year a few more carriers become convinced that they, too, need to look for actuaries to establish these effective asset/liability units in order to gain a competitive edge, enhance profitability, and manage their risk. Those with strong asset/liability experience will continue to be in demand with insurance companies and life consulting firms.

Let me touch on the recent trends in the pension consulting field. Twenty-one years since ERISA, among the remaining consolidated firms, there is an intense competition for a greater share of the defined benefit market, which means greater demand for pension actuaries. It has never been stronger. In the defined contribution area the Fidelity Funds and other mutual funds are dominating the market. Consulting firms are forming alliances with these players, resulting in a strong demand for defined contribution professionals.

Let's move on to the financial reporting specialty. As you know, GAAP reporting for mutuals is hopping. Many mutual companies and especially consulting firms are looking to hire actuaries with GAAP experience. The consulting firms are looking to service their mutual company clients as they prepare to report on a GAAP basis, and these carriers need to hire actuaries at all levels to do the work the consultants are creating.

In addition, demutualization is still news, and it will continue to play a significant role in the 1990s. GAAP actuaries and actuaries who have experience with a demutualization process will continue to be in demand by both insurance carriers and life consulting firms.

Merger and acquisition activity continues to be strong as insurers downsize and sell off specific blocks of business to create a synergy within their product line or market mix. The inverse is also true. Companies are buying blocks of business or are acquiring other insurance companies to capitalize on product mix, target market, distribution systems, or just for pure expansion. Those who have experience with company or block-of-business appraisals will be in demand by carriers and consultants, as well as the rating agencies.

Let's talk about individual product development. A trend we are seeing more and more is actuaries working in marketing departments and in company sales and brokerage operations. Insurance carriers are realizing the need to gain a competitive edge in speeding up the process of designing and implementing new life and annuity products.

There has been a substantial change in the longevity of products since the advent of interest sensitive products in the 1970s and the proliferation of life and annuity products in the 1980s. In the 1990s some product life cycles have been measured in a few short years and may soon be measured in months of peak revenue production. As a result of these time pressures, product actuaries who have good marketing and communication skills are being recruited for marketing and brokerage operations to ensure that creative products are financially sound at the onset of the process. In fact, this is what we should all be encouraging.

Having an actuary work with the sales force at the beginning of the process saves time and money as well as creates a team atmosphere in meeting customer needs at the field level, resulting in good, profitable products getting out into the marketplace quickly. This is an area where those of you in senior positions should investigate and promote within your own organizations.

I've just described how some carriers have included actuaries on their marketing and sales teams. Other carriers are incorporating their product management function into their actuarial departments. Regardless of where these openings are located, product actuaries today must possess a strong marketing orientation.

The following are some product lines where we are seeing an increased demand for actuaries. Individual annuities are the fastest-growing line of business in the life and health industry for a simple reason, demographics. According to the U.S. Census Bureau those in their prime savings years, ages 45-64, have increased in number by 18% from 1970 to 1990, and this number is estimated to grow another 55% by 2010 when the last of the baby boomers turn 45. The sales of individual annuities have exploded to capture this expected increase in baby boomer savings.

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

Insurers are also reacting to the rise in personal income tax at the federal level and are producing more variable life and annuity products to sell to wealthy Americans for tax-deferred accumulation. Relatively low interest rates and the demographics of the baby boomer's savings for retirement have also accelerated this shift from fixed to variable products. Life insurers are continuing their focus on these and other fee-based products. And, according to a prominent credit analyst firm, this is a promising trend from a credit perspective since the investment risks are unbundled and pass back to the purchaser.

Executive benefits, such as corporate-owned life insurance, are an expanding product line in spite of any pending adverse legislation that may be coming down the pike. Carriers and brokerage firms alike see these products as extremely profitable. Both are increasing their actuarial talent in existing and new operations.

Product joint ventures, direct marketing and direct response and the new low-load products have also become popular trends among the successful insurance carriers who are looking for other distribution channels, getting them closer to the consumer to sell more products and get a bigger share of their dollars.

Speaking of distribution, the fastest-growing niche in the industry today is banks. In 1994, banks sold 25% of all individual annuities based on premium volume. The banking community is capitalizing on their direct access to the middle income and younger consumers who are often overlooked by traditional agent distribution channels. And, according to the American Bankers' Association, within the next two years more than half the annuities will be sold through banks, which means more actuarial opportunities in this arena.

We can't forget reinsurance. This area is growing to keep pace with the expanding direct marketplace. In addition to financial reinsurance being a revenue generator, reinsurers are also capitalizing on the growth and popularity of annuities and their new distribution channels. Since banks are unaccustomed to assuming large amounts of risk, annuity expertise is in demand with reinsurers, too.

In the international arena reinsurers are expanding into the Far East, Latin America and South American markets. Being able to speak another language is an important plus on the international front whether it's on the reinsurance or direct side. And due to all the changes we are seeing in health care, with all the new types of funding arrangements, with providers assuming risk as they capitate groups of individual and services, an additional market is being created for reinsurance. This relatively new territory is starting to increase in actuarial employment activity.

Now, the most dramatic changes in employment trends, not surprisingly, are taking place in health care. With all the changes in health care delivery and health care reform, HMOs, hospital and doctor groups, consultants, and Blues organizations have all increased their need for health actuaries. Going into specifics could take all day, so suffice it to say where there is change, there is opportunity, and for health care actuaries this has been especially true.

Another area that is continuing to grow regardless of health care reform is long-term care. We see the continued need for actuaries with this expertise on both the direct and

RECORD, VOLUME 21

reinsurance side of the business as the over-65 and over-85 population continues to increase.

As you know, the individual disability product line is going through some major changes right now. Adding sex-distinct rate structures as well as changing classifications for certain professions will create opportunities for actuaries with expertise in this product line. The group LTD business is also growing. Many companies are separating the LTD line from the rest of their group portfolio and are putting together a team dedicated to capturing more of the market. This is also happening with dental products as well.

I have just outlined for you the employment trends in each of the different actuarial areas in a very broad sense, and there seems to be quite a bit of opportunity. This is all well and good, but many of these opportunities may not be in the city of your choice. As we all know, insurance companies are reengineering themselves, reorganizing their staffs, and even having their employees reapply and interview for their jobs. Yes, there is opportunity in the marketplace if you need to find another position or if you desire to better yourself, but what do you do if you are happy with your current position, with your present company, in your hometown?

Many times we do not get the opportunity to learn how to market ourselves correctly until we are forced to do so in the open market. Many of you may not have had to interview with another company or interview in a long time. As recruiters, when we help someone find a job, we also counsel them on how to present themselves in the best light.

I thought it may be interesting to give you some tips on how to market yourselves right now in your own companies. These are some of the same principles you would hear if you were preparing to go out on a job interview. Why not use them right now to help preserve your current position or get a better position within your own company? Most of these helpful hints will be obvious to you once you hear them. So, let me refresh your memory and start with the most obvious.

You must consider appearance. Like it or not, your outward appearance, your attitude, your confidence level, and your overall delivery are all affected by the clothes you wear. The respect you receive from others is in direct proportion to the respect your visual image earns before you have a chance to say a word. Employers rarely make overt statements about acceptable dress codes to their employees. However, those who wish to climb the professional career ladder will dress appropriately. Those who don't, won't.

You must dress for success for the position you aspire to. You don't need an expensive wardrobe. What you do need is to look corporate. Pressed shirts, maybe even white shirts with starched collars, ties that are in good shape, shoes shined. Women have more room for creativity in this area than men but also more room for mistakes. Stay within the accepted guidelines dictated by your company and the business world. Don't let your appearance affect a promotion either. Think about the people you work with. How does upper management look? Dress for success or for your next promotion. Make sure your appearance enhances your intelligence and abilities, not detracts from it.

Eye contact is also very important. Looking at someone means showing interest in that person. We all know maintaining good eye contact is a must in a job interview situation. Well, it's just as important when you're speaking to your boss, your direct reports, your

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

peers, and when you interface with other departments. It gives people the impression you are attentive, sincere, committed, and confident. Looking away from someone for long periods of time while he or she is talking, closing your eyes while being addressed, repeatedly shifting your focus from one object to another point, these are likely to leave the wrong impression. You don't want others to think you are disinterested or lack self-confidence. Maintaining good eye contact can be learned with practice, and it is extremely important to one's overall image in every profession.

Let's move on to body language. Given the choice of going blind or going deaf, which would you choose? Think about it. If you are like nine out of ten other people, you would choose to go deaf. The vast majority of us rely to a remarkable degree on our ability to gather information visually. The old adage that actions speak louder than words is something we should all take quite literally. Studies done at the University of Chicago found that over 50% of all effective communication relies on body language, so let's start with the greeting.

Giving a dead fish handshake or the bone crusher grip will not foster the positive first impression in any meeting with senior management, agents, or anyone with whom you are meeting for the first time or otherwise. The ideal handshake should signal cooperation and friendliness when executed professionally and politely with a firm grip, a warm smile, and good eye contact. Match the pressure extended. Never exceed it, especially with someone more senior as this may send the message that you have a desire to dominate the relationship.

While all parts of the body are capable of sending positive and negative signals, there are numerous individual gestures that either improve or diminish your chances of success. One is: avoid rapidly nodding your head as that can leave the impression that you are impatient to add something to the conversation if only the other person would let you. Slowly nodding your head, on the other hand, emphasizes interest, shows that you are validating the comments of the other person, and encouraging him or her to continue. Also, watch out for hands and fingers that take on a life of their own during meetings. Fidgeting with paper, your hair, or pen tapping, can be interpreted as an action of an impatient person. When in doubt, use a mirroring technique. Copy the body language, the stance, the posture of someone you respect and who is respected by others. Be cognizant of the signals your gestures send. Understanding and directing your body language will give you added power in promoting yourself within your company's corporate structure.

The next and very obvious and important tip is on listening skills, and their importance is manifested in two different ways. The first is, "Do you listen to others?" and the second, "Do others listen to you?"

The problem all of us have in paying attention is the fact that it only takes 15% of the brain to process and understand language. We therefore have 85% free attention span left over whenever someone speaks to us. Every speaker has to fight for that 85% in order to keep his or her audience from daydreaming, problem solving, or the random thinking we all do with that available brain power.

In business, whether it's one-on-one or in a meeting situation, we all can use refresher lessons in listening. In our enthusiasm to tell our ideas and make ourselves known, we

sometimes fail to consider that someone else has ideas, too, and that we need to take the time to hear them. This is especially true in a group situation where we are visible to each other and to the boss. Our competitive spirit may urge us to dismiss others' contributions or see them as a threat. Interrupting and cutting off the end of someone's sentence, jumping from one subject to another with no connection to what's been said, or several people talking at once, are all hallmarks of not listening.

Does any of this sound familiar? How do you fix it? It's not so simple because we're built to think much faster than we talk. Remember, only 15% of our brain is needed for understanding words, and 85% is left to do nothing. That gives us all that leftover time for thinking our own thoughts or criticizing yours.

I have put together some techniques to help improve your listening skills:

- Put yourself aside. I promise when it's your turn to talk, you'll be able to manufacture the words without having rehearsed them while I'm talking.
- Get curious. What's his or her idea? Since you already know what you think, make yourself find out and discover a new idea. It's interesting just to hear how differently we all think and how many solutions there can be to any one problem.
- Listen to all of it. As you listen, try to figure out where he or she is going and what the conclusion will be, but wait for the end before you speak.
- Build on what you've just heard when it's your turn to speak. "Joe just brought up x. Why don't we do . . ." or pick a few words you've just heard and incorporate them into your opening. This not only tells everyone you were listening, but it is a sign of respect to the previous speaker, making you a friend and enlisting him or her as a supporter.
- Take notes. If you have lots of trouble listening and doing these steps, you might try taking notes as other people speak. This forces you to focus. Good listening skills are as important in one-on-one situations as they are when you lead or participate in a group. This skill is extremely important in your success and in communicating with all levels of people.

Let's discuss the presentation. Consultants are accustomed to presenting to clients. They have an agenda, and their goal or objective is to ultimately convince a client or a potential client to buy into a concept. Not only are these consultants well-prepared when they solicit a new piece of business, but also they know how to interest their audience when presenting their work.

In insurance companies, you are not necessarily taught how to give presentations in the formal sense, and unless you deal with marketing or sales functions, you may never need to learn how to give formal types of presentations. Is this true? Well, if you answered yes, you're wrong. Everyone needs to know how to make a presentation, and I'll tell you why. How else will you clearly and succinctly present yourself, so you can effectively communicate your opinions or simply inform others of the work you have done or are doing?

When all of us work with people for a long time, we have a tendency to become complacent or too familiar and are more likely than not to fall into sloppy communication habits. We engage in seat-of-the-pants methods of communicating. This is not necessarily wrong, but if you are looking to market yourself for that next promotion or next rotation, it would be wise to do some preparation.

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

For example, when you go to a meeting to present the results of your recent work, practice beforehand what you're going to say instead of just winging it. Make an outline of the points you want to cover, and even write out your so-called speech in longhand to practice your delivery before the meeting. The more you practice, the smoother the delivery will be, and the more confident you'll appear. You'll even be impressed with yourself, and all it took was a little practice and preparation.

To summarize, preparation, the right appearance, good eye contact, correct body language, and good listening skills will greatly enhance your ability to secure your next promotion or an important position within your own company.

Now that you know how to market yourselves within your own organizations, I want to return to our discussion on the employment trends in your profession. This portion of my presentation will explain my thoughts about your future because I believe you can and should take a proactive role in creating new opportunities.

In 1993, at the annual SOA meeting, both Walt Rugland and Steve Radcliffe emphasized that this is a young society of professionals. I am glad that this group is comprised of some of the more seasoned members of the profession because it is you who have seen the job market change during your career, and it is also you who can affect future changes.

First, let me review the state of the current job market. It is getting better, or, busier, I should say, and better is a relative term due to many factors. The number of jobs that are available is increasing, but the number of applicants is increasing, too. The supply is still exceeding the demand in some areas, but demand is increasing.

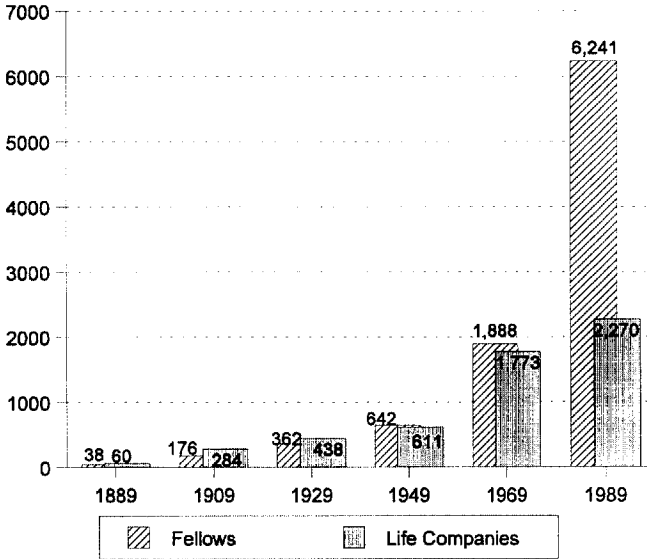
Now I'd like to take a moment and go over some interesting facts about your profession (Table 3). As I mentioned, the SOA is a young, growing group of professionals. If you take a look at this table of FSA and ASA growth from 1988 through September 1995, you will see an overwhelming increase in Associates, from 5,118 in 1988 to 9,332 in 1995. Being named the number one profession a few years ago contributed to the numbers of students graduating from college with an exam or two, looking for a career as an actuary. In the last seven years the total number of Associates has practically doubled. The number of new Fellows has also increased. In 1995, 328 Associates became Fellows, and the Society projects that this number will continue to exceed 300 from now on.

TABLE 3
FSA AND ASA GROWTH

Years	Fellows	Associates	Total
1988	6,039	5,118	11,157
1989	6,241	5,543	11,784
1990	6,453	6,006	12,459
1991	6,715	6,653	13,368
1992	6,976	7,217	14,193
1993	7,199	7,885	15,084
1994	7,358	8,611	15,969
1995	7,621	9,332	16,953

Let's take a look at Chart 1. I thought it would be interesting to compare the number of Fellows in actuarial organizations to the number of life insurance companies over a hundred-year period. Unfortunately, my data stop in 1989, but the trend is evident. The number of FSAs is clearly growing much more rapidly than the number of life insurance companies, and not only is the number of insurance companies not growing as fast, but also insurance companies are, in fact, trimming their excesses and paring themselves down into leaner organizations.

CHART 1
FELLOWS VERSUS INSURANCE COMPANIES



It is no secret that the market has been tight the last couple of years. The market continues to be tight with mergers, acquisitions, downsizing, and so on, reducing the number of actuarial positions. Couple this with many more actuaries applying for the fewer available openings, and a competitive job market is created just due to the sheer number of applicants. Yes, many may not be qualified for a particular position, but they still would like to be considered for these jobs in hopes of learning a new area or just getting employment.

As actuaries, there are many challenges facing you in order to develop strategies for reengineering the traditional workplace, and in order to create opportunities for yourselves. So, let's "ask an actuary."

I want to take this theme one step further and create an environment where other professionals outside the traditional actuarial and corporate areas ask an actuary to work with them in their departments. Let's move actuaries into other departments. This way you'll be increasing the number of actuarial positions. This is happening within the marketing and investment departments, but we need to see more of it.

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

Some of you are probably saying, well, what about the nontraditional opportunities such as positions in investment banking and credit and rating agencies? Yes, the actuarial market is expanding into these nontraditional areas, but the numbers represent a very small percentage of the total job market. Where you can have the greatest impact increasing the number of actuarial positions and where you can work harder to affect change yourselves is in your own companies. Every actuarial professional must make a concerted effort to look for new areas within his or her company and create new positions for actuaries, or find existing positions or openings and convince management that an actuarial professional would do a better job because managing risk will also be addressed. You must all become salespersons who are selling your profession's talents to other areas of the companies. How do you do this? Actuarial consultants have been doing this every time they sell a piece of business to a nonactuarial client. You have to speak their language. When selling to a marketer or an underwriter talk to them like you were one of them. What are their concerns, issues, problems, desires, needs? Explain to them the actuarial principles and financial risk in terms they understand so it makes sense to them. Are you doing it? Is it working? If not, then try another way.

In order to prosper in the 1990s and beyond you must all learn to communicate what you know not just with your peers but with different professions as well. The job market is better than it was a few years ago, but the number of people coming into it is increasing at a fast pace, too. You cannot just rely on others to increase the number of job opportunities in your profession. Everyone has to do his or her part if we want to turn the clock back to the time when there were more opportunities than candidates.

As recruiters, we are always trying to create new situations and opportunities, but it takes an actuary or someone who has worked with an actuary to make the suggestion to create a need. It is you who can affect this change, create opportunities for the profession, for yourselves and colleagues, so we can grow the profession not just in numbers but in the number and scope of opportunities.

We have to expand the demand. Not only will you be helping out future generations, but, more importantly, you will be increasing opportunities for yourselves to serve you till you want to retire. And remember, the insurance industry was built on the basis of accepting risk and managing it for a profit. Who else is better equipped with this knowledge and expertise than you, the members of the actuarial profession.

MR. GODFREY PERROTT: The actuarial profession is not dead yet. I have a different message than Aimee did. Helen had asked me to talk about what the Board Task Force on Education did and some of my personal views. I'm very concerned that the profession today is complacent and arrogant. We have been rated number one too often, and I think that we face significant dangers. What I hope to do in my presentation is point out some places I think we need to change and identify what we need to do both individually and collectively to ensure our success and our profession's future.

There will be increased opportunities for some actuaries in the 1990s. There will be decreased opportunities for others. As I've already said, I'm concerned that we're a profession with our head in the sand and facing possible extinction.

We've mentioned the Board Task Force on Education, and I want to tell you very briefly what it is and what it has been doing because it feeds into what I'm saying. We are a task

force that was appointed by the SOA Board almost two years ago. There are six members, and we were asked to take a fresh look (or a step-back look) at what the education of the actuary needed to be in the future. Many of our conclusions, which I'll get to later, were based on each of our concerns that the profession was not heading where it needed to be.

I did a quick survey of the local companies to determine how many actuaries were in top management. This was to prove a thesis that I've held for some time that they're declining. The companies on the list are Allmerica Financial, which used to be State Mutual, Berkshire Life, Boston Mutual, John Hancock, Keyport America, Mass Mutual, New England Mutual, and Paul Revere. In each of those companies there is some kind of a top management group, a President's council, an operating council or committee or whatever. It averages about nine people, and an actuary is over just one. Helen gathered similar numbers for the Prudential, and it's not very different except for size. There are 30 senior vice presidents or higher, of whom six are actuaries.

Who are the actuaries who will succeed or have better opportunities in the 1990s? They are actuaries whose background is based on three components. They need the mathematical skills that we have always stressed. They need the business skills that Helen talked about. An actuary who doesn't understand the context of the work he or she is doing, in my opinion, is an actuary who is of very little use to anyone. And we need communication skills. If we cannot communicate what our conclusions are, what our findings are, then we accomplish nothing in reaching those conclusions or findings.

There will be decreased opportunities for other actuaries: actuaries who do not understand the business context of their work, actuaries who focus on techniques rather than results, and actuaries who fail to communicate the implications of their work. I have two sample communications.

Actuary A has completed a project, and says, "I used a sophisticated stochastic process to determine that the return on equity of the proposed new product has a mean of 13.52% and a standard deviation of 3.25."

Actuary B says, "I reviewed the proposed plan with the agency division who gave me optimistic, realistic and pessimistic sales figures. I calculated the return on equity (ROE) for each level of sales. Our ROE target is 15%. The ROEs I calculated for the sales figures are respectively 20%, 13%, and 8%. Unless we think the agents can sell more than their realistic estimate, we need to reprice the product in order to get a bonus."

I hope the message in those two is clear. I want to talk about another area that I'm very concerned about, which is the fragmentation of our profession. There are just under 12,000 actuaries in the U.S. The proxy I used is members of the Academy because I wanted to use the U.S. as an example. These actuaries are represented by five different actuarial organizations: the AAA, the American Society of Pension Actuaries (ASPA), the Casualty Actuarial Society (CAS), the Conference of Actuaries in Public Practice (now the Conference of Consulting Actuaries), and the SOA. It's very instructive to compare this with other professions with which (to some extent) we compete for public influence as a profession. Accountants have 325,000 practitioners and two national organizations. Attorneys have 370,000 and one. Dentists have 140,000 and two. Doctors have 295,000 and one. There are 12,000 actuaries! We should have one

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

organization, but in fact we have five. I do not believe we can afford to continue to divide our representation with the overhead cost of each organization and with the turf squabbles between them. We have to become rational.

Actuaries face a great deal of competition, and if we don't deal with this competition, we will not survive. More actuaries are going into consulting and less into insurance. The fast growing segment of consulting actuaries is the big six accounting firms. Does this imply that actuarial science will become a subspecialty of accounting? That sounds very stupid, but I think over the long term it's something we should be concerned about. Where else is the competition? Quantitative management schools like Chicago understand and use much of the mathematics underlying the old ASA syllabus or the first half of our exams. Routine actuarial tasks have been replaced by computers. Almost any finance MBA understands discounted cash-flow methods. What is the core competency of an actuary? I believe the core competency today is modeling. If actuaries are willing to step forward, virtually any other businessmen will defer to them in terms of modeling uncertain events, but we need to hold onto that core competency and move forward with it.

The Board Task Force on Education adopted a definition of what an actuary is; it's a high level definition. It's not new. It draws much from the Actuary of the Future Task Forces:

"An actuary is a professional who manages, and is perceived to manage, the strategic and financial implications of risk."

That perception has to be by the individuals who are taking the financial risk. I've added the last sentence. It doesn't do any good if we perceive ourselves as that, although it's helpful. It's far more important that our customers, clients, audiences, call them what you will, perceive it.

The Board Task Force on Education had several recommendations, and I want to touch on them briefly. These items can be found in our report. We emphasized flexibility. Actuaries in the future have to be able to deal with unstructured problems. The highly structured problems are disappearing and will disappear and, now, add little value. We have to be adaptable to change. This is very obvious if you look at how health insurance actuaries have, as Aimee said, migrated to consulting with providers and anyone who's taking risk in the medical area. Modeling expertise I've already identified as our core competence. It is vital that we understand models, that we understand where to get the input from, how to look at the output and how to communicate what the model means and what it doesn't mean.

We have to think globally. While we practice in the U.S., what is going on in other countries affects us immediately in techniques, in marketplaces, and our competition is looking at it. We should seek to apply contingency theory to all areas. One thing that I find very depressing is that when mortgage insurance was developed—that is, not the life insurance version, but the insurance that says that, if you don't pay your mortgage, someone else will—no actuaries were used in its development. The financial companies that went into that didn't even consider that they needed actuaries. Product warranties have had very little input from actuaries, and yet they are clearly a contingency problem. Municipal budgeting is very similar to pension financing. When you're issuing bonds,

RECORD, VOLUME 21

which will be retired by a tax on a variable base, that is an actuarial problem that I don't believe any actuaries are working on. Lastly if we don't add value to whatever we do, there will not be a marketplace for us. We're not entitled to employment. We're not entitled to a future. We have to add value to deserve that future.

This has been a little bit disjointed, but I want to summarize my conclusions. There is a future for actuaries if we change to make that future ours. Conversely, there is not a future if we continue in business as usual. Some actuaries will have to change to be part of that future. All of us will have to change somewhat. There are several important things you can do to improve your future and make it attractive. Do all you can to increase your knowledge of the business context in which you work or might work. Do all that you can to improve your communication skills. And we have to, I believe, change the SOA exams so that we do not send a strong message that this is solely a mathematical profession. Mathematics is necessary, but business and communication skills are even more necessary. By currently making the initial exams essentially college level math, we send a message that we're looking for mathematicians. We need to change that message.

MS. AMY J. TALANKER: I believe it was Aimee who made the subtle point that opportunities are out there but may not be in the city of your choice. Could any of you comment on where you see the opportunities moving geographically?

MS. JORDAN: The opportunities are all over the country. It depends on what particular area you are looking for. In most all geographic locations there are opportunities, but if you are a health actuary or an individual health actuary, there might not be something in Hartford. If you are a pension actuary, there may not be something in Chicago for you. If you are a life actuary or a product actuary, there may not be something in Indianapolis, and you may need to be a financial person to find a job in Indianapolis or whatever. Do you understand what I'm saying? The profession has many different practice areas. You need to have particular expertise in a practice area to gain employment in that area, and it may mean moving to another city.

MR. DAVID G. W. BRAGG*: We think we have an answer, a solution, a formula for success, if you will, to these problems. We think fee-based actuarial counseling for an individual represents a career direction that actuaries must pursue to survive into the next century. Our firm has developed a product rating system. We call it the Bragg Index. And we did a little market test. We publicized our service, actuarial counseling, among a group of sophisticated investors and were astounded at the level of response we received, the willingness to pay fees for advice on insurance-related questions. We think that support systems need to be developed to support actuaries who want to go into this kind of work. A product rating system, independent such as ours, needs to be recognized and promoted, the ability to rate products relative to each other. An actuarial standard of practice needs to be developed to help individuals who want to go into this kind of business.

Every actuary I've ever known in my life at one time or another has been approached by somebody, a friend or relative, who said I have an insurance decision, I have a decision

*Mr. Bragg, not a member of the sponsoring organizations, is Vice President of Bragg Associates in Atlanta, GA.

ACTUARIAL OPPORTUNITIES IN THE 1990s AND BEYOND

to make, and I have a problem. Mother-in-law needs to know what to do with her pension plans. Actually, I promote this service and idea among actuaries. The International Congress of Actuaries in 1992 in Montreal published a paper by Jack Bragg called "Actuarial Counseling: A New Role" that describes this concept and the formula for getting into this business and how to make it work. It depends on an individual's ability to market himself or herself and his or her skills. This paper is available in the literature section of the library of Actuaries Online and I urge you to read it.

MR. ALAN W. FINKELSTEIN: Helen, I'd like to mention one thing. You had referenced the competencies grid that was developed by the Committee on Management and Personal Development, of which I was an outgoing member. Richard Wong is a person whom you can contact, a member of the committee who developed the grid. I highly recommend it. It's a way of looking over all the different skills, whether it be technical or business related, and rating yourself as to whether you have that strength or whether you're in need of development, and also how you would rate your progress.

