



FELLOWS

March 2014, Volume 20, No. 1

How to Spot a High-Level Bloom Question and Successfully Answer It

By Steve Armstrong, Examination Committee Chair, Guest Writer and Elie Bochner, ACAS, Candidate Liaison Committee

Over the last several years, the CAS has gradually adjusted the upper-level exams to test the actuarial student's knowledge at higher cognitive levels. One way to distinguish a higher-level Bloom's question is that its answer cannot be succinctly captured on a notecard. In the past, committing to memory all the lists, definitions, calculations, and techniques previously tested was a good strategy for success. Today that is only part of the exam-success equation. The successful candidate must also synthesize multiple ideas and apply concepts in unusual situations not necessarily directly covered in the syllabus readings.

So how can candidates get a better handle on the more challenging exam questions? Study the syllabus readings, and don't rely solely on past

exams and seminar materials. Exam writers craft questions from the Learning Objectives, some of which are more open-ended than others. These are the fertile soil where Bloom's questions can grow. Work with study buddies to invent your own questions and challenge each other to transcend the prescriptive parts of the syllabus. Come exam day, point values will help you gauge the depth of response needed for full credit. However not all high-level Bloom's questions demand a high number of points or length answers. They may instead require creative but simple insights.

As always, candidates should pay close attention to the wording of the question. Prompts like "recommend," "justify," "propose," "sug-

⇒ turn to page 3

POLL QUESTIONS

Future Fellow, we want to hear from you!

Please share with us your favorite or most unique post-exam celebration. Entries may be selected for an upcoming issue.

Do you have a question on the CAS admissions process you want answered? If so, here's your chance. Submit your questions. We will have the Examination Committee leadership answer some of the common questions in the next issue of Future Fellows.

Visit the Future Fellows section of the CAS website or scan the QR code below to submit your response.



CAS Student Central Launches

By Adina Erdfarb, ACAS, Candidate Liaison Committee and Tamar Gertner, CAS University Engagement

Campuses are buzzing about CAS Student Central, a new program for university students looking to make the transition from college to credentialed actuary. Launched in January 2014, the program offers numerous benefits to its student members, all with a modest price tag, "free."

Based out of its website, CASstudentcentral.org, Student Central is the place for students to find all of the latest news, information, and advice as they embark on the path to becoming property-casualty actuaries. Once registered, university student members can access all of the

latest resources and materials, including study tools, career expertise, and an online community, in the site's members-only sections.

From students gearing up to take their first exam to those with several preliminaries under their belts, the Study Tools Section will give you the skills you need as you work toward your FCAS designation. The site offers study advice, recommends coursework to complete while in school, and suggests study guides and sample exams. Students can also find the latest announcements regarding dates and deadlines

⇒ turn to page 3

DATES TO REMEMBER

EXAM REFUND DEADLINE

Exams LC, ST, 5, 6Canada, 6US, 7, and 9
April 18, 2014

CAS SEMINARS AND MEETINGS

MIDWESTERN ACTUARIAL FORUM (MAF) SPRING 2014 MEETING
Northbrook, IL
April 11, 2014

NO SPRING MEETING IN 2014

You Have a Mentor. Now What?

Tips on how best to maximize a mentor relationship

By Brian Suzuki, FCAS, Candidate Liaison Committee

S ometime in your career, you will probably end up having a conversation with your manager talking about career development and it will be suggested that having a mentor would be of great value. You have most likely received coaching your entire career from your boss, have had in depth discussions with your peers on best practices, and may have invested some time reading leadership books. What role would a mentor play? In reality, the mentor may be the most useful resource to unlock your leadership potential. Once you have decided to work with a mentor, here are some key things to think about to maximize that relationship.

One of the most critical aspects of a mentor/mentee relationship starts even before it begins. The selection of the right mentor will most likely have the biggest impact on the relationship success. Many times when a manager suggests to an employee to consider working with a mentor, a specific mentor is also suggested. Don't be afraid to push back, even to your manager, on pairing up with the right mentor. Your manager already has seen the potential in you so exhibit leadership and own the decision. It is probably a good idea to do a little research on potential mentors and speak to your top choices prior to making a final decision. One other precaution is that not all great leaders make great mentors.

Now, once you have selected a mentor, there are many keys to building a successful relationship. One of the most important factors as you enter into this relationship is your openness to feedback and willingness to work on specific items your mentor will point out. A typical mentor has no direct reporting relationship to a mentee, which affords the mentor the ability to be very impartial and direct in providing feedback. Your reaction may be defensive at first or you may want to rely on your manager's opinions to refute certain portions of feedback, but remember that the right mentor will identify your largest opportunities to improve and it can be shocking and hurtful in the moment. The more you explore the feedback, the better you will be able to identify how to address it.

When you begin each session, be well prepared and own the agenda. These sessions are about you and what you want to discuss and work on. It is extremely helpful to be self-aware

and be able to identify areas for career development that may be particularly hard for you. It is also important to not just lay out what you want to work on, but how your chosen mentor can best assist. For example, bringing up scenarios in which you have seen the mentor exhibit a specific leadership quality and how you want to be able to learn from that mentor will enhance your conversations.

One of the most important factors as you enter into this relationship is your openness to feedback and willingness to work on specific items your mentor will point out.

Lastly, it takes practice to develop new career enhancement skills, so as you and your mentor discuss focus areas, you will need some live learning environments to test and learn. You may require support from your manager to ensure that you are allowed the latitude to try new things and that your manager may have to live with a few unexpected bumps along your journey. Use your mentor to help guide you towards safer environments to learn. If possible, explore business opportunities where your mentor can watch you in action as a participant in a discussion, but not necessarily as a primary decision maker.

So, the next time someone recommends that you find a mentor, embrace the experience. There are many different mentorship styles so find the right mentor for you. True success in the relationship comes from your own willingness to open yourself up for development and doing the appropriate homework in between your mentor sessions. **ff**



How to Spot a High-Level Bloom Question and Successfully Answer It

from page 1

gest,” “fully discuss,” and “compare and contrast” ask the candidate to apply rather than regurgitate the knowledge gleaned from the syllabus. Even seemingly straightforward prompts like “calculate” can show up a high-level question if the calculation is not demonstrated step-by-step in the syllabus readings.

The 2013 Spring Part 5 Exam, “Basic Techniques for Ratemaking and Estimating Claim Liabilities,” offers a few good examples.

Question #5 is a four-point question that provides a series of data and asks the candidate to “Calculate the indicated rate change.” The first bit of high-level reasoning required is to understand the data and its limitations before jumping into answering the question. It also combines elements of ratemaking and reserving, something candidates can expect to see more frequently now that Part 5 is no longer separated into a reserving half and ratemaking half. The point value also suggests that significant work is needed to receive full credit. A successful response correctly assembles the building blocks, calculates an indicated rate change, and explains any assumptions made.

Question #11b asks the candidate to “...recommend and justify which rating variable the insurer should implement within a risk classification system” without performing any calculations. The point value of 0.75 hints that three items (each worth 0.25 points) are needed for a solid justification. This can be accomplished in three brief sentences.

Question #18e exemplifies how a simple question can still demand higher-level thinking. It asks the candidate to “Compare and contrast the Cape Cod method and Bornhuetter-Ferguson method by providing one similarity and one difference,” and it is worth 0.5 points. The answer is not something typical candidates would have codified in their notecards, yet the question covers two common techniques that candidates are no doubt very familiar with individually. Comparing and contrasting the two, however, goes beyond mere memorization of the syllabus. Two sentences, one for the similarity and the other for the difference, are all that is needed to ace this high-level Bloom’s problem.

CAS Student Central Launches

from page 1

in the community calendar.

Aside from attending classes and studying for actuarial exams (and trying to maintain a social life!), university students are also starting the arduous process of applying to internships and full-time jobs. To help in this effort, CAS Student Central offers members everything they will need to stay ahead of the competition. The Career Resource Section features professional advice on the job application process that is both general and specific to the actuarial field, from writing resumes and cover letters, to dressing appropriately, to nailing the interview.


But Student Central doesn’t stop there, because jumpstarting your career isn’t just about getting the job, it’s about excelling at it too. Being a well-rounded actuary requires a unique blend of quantitative and qualitative proficiency, and Student Central aims to prepare you as best as possible. The Technical Toolkit focuses on skills that go beyond the classroom, such as statistical analysis and data manipulation as used in a business context. Yet even the most intricate actuarial analysis is useless if it is not presented in an effective manner, and Student Central offers tools to develop your soft skills as well, making you workplace-ready in every sense.

And perhaps most importantly, CAS Student Central connects you to an exclusive circle of both current and future P&C actuaries. Through the CAS Student Central Online Community, registered users can network with fellow student members

who are going through the same exam and job-application processes. Students can read and respond to Future Focus blog posts written by industry actuaries (including university liaisons), academics, and recruiters, and can also post questions and comments on topics of interest in the forum.

Yet CAS Student Central is not confined to a single website. Registered users will be invited to attend free webinars and networking events, including seminars, conferences, and career fairs. Student Central members will also have access to the CAS online membership directory, as well as the CAS lending library.

Enrolling in Student Central means creating your own CAS footprint before even graduating, giving you a leg up as you pursue a career in the property-casualty actuarial field. What else does CAS Student Central have to offer? You’ll just have to join to find out! Visit <http://www.casstudentcentral.org/about-cas-student-central/join-us/> to register today.

To qualify as a charter member of CAS Student Central, students must be enrolled as an undergraduate or graduate student at a college or university, provide a university-based email address, and provide the name and contact information of a university professor who can verify your student status, if necessary. 

STUDENT  CENTRAL
FOCUSED ON YOUR FUTURE

Part 5, Fall 2013, Question 12 tested at the highest level of Bloom's taxonomy:

12. (2 points)

An insurance company has recently entered a new state and plans to invest heavily on marketing in an attempt to aggressively grow its homeowners book of business. Relative to the low initial premium in the state, these marketing expenses will be significant.

The company's senior management proposes that the actuary develop a rate level where the expense provisions reflect only the typical variable costs. Construct a thorough argument in support of this proposal.

While a candidate need only discuss one consideration to receive full credit, a wide array of considerations could be chosen. Take a look at the sidebar below for an excerpt from the exam rubric to see the variety of responses a highest-level Bloom's question elicits.

In summary, each of the upper level exams will continue to evolve towards higher-level Bloom's questions. Master the exam material by studying the Learning Objectives and mastering the content beyond what is prescribed in the readings. On the exam, be aware of prompts that may justify unique arguments or insights from multiple sources of data. Additionally, continue to use the point values as guides to how much to write for any given response. **ff**

Rubric, Exam 5

Grading

Grading was performed according to the following guidelines, with multiple considerations required to merit a full two-point grade.

- A thorough discussion of one consideration yields 1 point.
- A discussion of one considerations yields 0.5 points
- A listing of one valid consideration with limited clarity or no discussion (and thus limited clarity as to what was meant) may yield 0.25 points.

Considerations

Lifetime Value Analysis (including Asset Share Pricing Model or Cost Benefit Analysis) – as the book grows and renewals persist, loss ratios on renewals should be lower and the fixed expense cost will be spread among a larger book premium volume resulting in profitability to the company. The cost of not charging for fixed expenses could have a positive NPV over a reasonable time horizon. No credit for the argument for a “pure bait and switch,” where policyholders are enticed in with low rates and then given big rate increases upon renewal.

Competitive position – including the fixed expense in the rates may result in uncompetitive rates. High rates may also lead to adverse selecting and unprofitable business.

Overall rate level for the product – including the marketing expenses should not be included as it will make the rate level for the product unaffordable.

One-time expense – rates are established for future periods of time. The marketing expense is a one-time cost, and will expire while the rates are still in effect. Including this expense will result in rates that are too high.

Statement of Principles –

Principle 1: A rate is an estimate of the expected value of future costs.

Principle 2: A rate provides for all costs associated with the transfer of risk.

Principle 3: A rate provides for the costs associated with an individual risk transfer

Principle 4: A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer

Retention – the front-end investment is expected to pay off in the long run. This is expected to result in a broad customer base and/or customers that are fairly inelastic, thus justifying the heavy investment in growth.

Regulatory environment – if the rates include the marketing expense, they may need to be reduced in the future. There will be additional expense and time associated with having to re-file. Alternatively, would regulators approve the somewhat higher rates resulting from inclusion of the fixed expenses?

Extreme case – no company would build in the entirety of a fixed expense load on a very small (i.e., single-policy) book of business. The actuary can work towards a rate that is an estimate of the expected value of future costs, but consider those costs over a longer time horizon, or perhaps over a broader base, allowing other states to subsidize the expense of management's proposal.

Company Investment – similar to the last two points, the argument can be made that the company investment in marketing should not be borne by the policyholders (essentially, this should be passed to the investors).

Note 1: Responses that indicate a pure subsidization (charge less here but make up for it by charging more elsewhere) will not be considered valid, but the argument that this marketing will help with other products in other regions will be considered valid.

Note 2: There should not be any penalty for candidates who consider the marketing expense to be a variable expense and the large marketing expense discussed in the problem as an atypical variable expense.

This Actuarial Life – Consulting

By Katrina Redelsheimer, ACAS, Candidate Liaison Committee

This is the first in a series of “This Actuarial Life” articles that will illustrate the day-to-day life of the actuary in different fields.

When choosing a career, it’s important to understand what your job will involve on a daily basis. The world is full of people who loved what they majored in but don’t end up loving the day-to-day reality of their jobs. Actuaries are known for loving their jobs. What drives this high level of job satisfaction is not just the interesting and challenging subject matter but also the everyday experience of the actuary’s job.

What your typical day looks like depends on the kind of actuary you are. It’s not so much about the line of business you work in but the type of firm you work for. Insurance companies, consulting firms, rating bureaus, audit firms, regulatory agencies, reinsurers, brokerage firms, and others hire actuaries—and the life of the actuary is different at each.

When you think “actuary,” you probably think “insurance company,” but the largest single employer of actuaries in the United States is actually a consulting firm. Some 16% of active CAS members are employed as actuarial consultants. Consulting firms range in size from global companies with tens of thousands of employees to lone actuaries setting up their own shops. So what do these actuaries do all day?

Projects! Projects! Projects!

The work of a consultant is project-based. Projects tend to take four to eight weeks from start to finish. Consultants manage multiple projects simultaneously, continuously moving each one forward. Strong time and workflow management skills are therefore crucial.

The majority of the typical consulting actuary’s work is annuity work, that is, repeat projects that are updated annually or more frequently. Reserving projects are the most com-

mon, but other common work includes forecasts (calculating the amount to be paid in the upcoming calendar year), rate reviews, rate filings, predictive modeling, enterprise risk management, and catastrophe/reinsurance modeling.

Projects are done for clients. Clients may be insurance companies, large corporations with self-insured liabilities, public entities, captives (an insurer created to sell insurance to the company that owns it), or others. All lines of business use consulting services, and consultants often work across multiple lines of business. Consultants also sometimes specialize by type of work (e.g., reserving or enterprise risk management), type of client, or line of business.

The work of a consulting actuary results in a deliverable, i.e., a report or presentation, for the client. Most deliverables have two parts: a written explanation of the work and its results and exhibits showing the calculations supporting those results. Both parts are essential both for the client’s understanding and to abide by the standards of the profession.

Documenting and Developing

Projects typically begin with data provided by the client. Manipulating the data into a usable form is sometimes the most time-consuming part of a project. Data must be reviewed for internal consistency and compared to any prior data available. Any discrepancies must be explained, addressed with the client, and documented appropriately.

The cleaned-up data is then fed into the exhibits. Many companies develop proprietary software, often built on top of Microsoft Excel (VBA) or Access (SQL), for this purpose. This software organizes the data into the triangles and ultimate projection methods with which Exam 5 takers are familiar. Most commonly, however, exhibits are built in Excel using a simple template. Spreadsheet complexity varies depending on

the size of the liabilities, the line of business, the reinsurance structure, the state of the data, and other factors. Regardless, the consulting actuary can expect to spend a great deal of time in Excel.

After the actuary completes the technical work (selecting loss development factors, applying actuarial methods, and developing ultimate losses in the case of reserving work), the results are summarized in the written report. While much of the report will consist of standardized language, portions must be customized for the particular client. Business writing skills are therefore highly important to the consulting actuary as well.



⇒ turn to page 8

A Brief History of U.S. Actuarial Organizations

By *Katrina Redelsheimer, ACAS, Candidate Liaison Committee*

If you're reading this article, chances are you're aware of the recent rebranding effort by the CAS, complete with a new logo and tagline: "100 Years of Expertise, Insight & Solutions." 100 years. It's hard to believe the CAS has been around that long, and it got me curious about the history of actuaries in the United States.

There are a number of oddities among the actuarial societies of the U.S. For instance, where most countries have one, the U.S. has five (CAS, SOA, AAA, CCA, and ASPPA). For much of the history of the profession in the U.S., there were actually four. We do not roll up under the International Actuarial Association like the actuarial organizations in most countries do. And of course, we're all aware of the unique divide between the life and property-casualty practices. Why did our profession develop in this particular way?

Multiple organizations are primarily the result of historical circumstances. The Actuarial Society of America (ASA) was the first actuarial society in the U.S., formed in 1889. The ASA consisted of actuaries practicing in the Northeast. In 1909, a second life society, the American Institute of Actuaries (AIA), formed in Chicago.

The AIA was founded to fill a need for a society that was more central to the new insurance companies forming outside the Northeast. "Old school" Northeastern actuaries and their insurance companies had different practices and priorities from the newer practitioners and firms in the South and West. Additionally geographic issues (travel and communication were non-trivial activities back then) demanded an organization headquartered in Chicago.

With the development of workers compensation, casualty work became a significant field in need of its own representation. As a result, the Casualty Actuarial and Statistical Society of America (CAS) formed in 1914. Additionally the Fraternal Actuarial Association (FAA) was founded in Chicago in 1916 by actuaries who were members of fraternal societies.

As time went on and geographic concerns lessened, the two life societies overlapped increasingly in terms of educational efforts, membership, research initiatives, and public policy advocacy. A merger was anticipated and viewed as inevitable during the second quarter of the 20th century. The two societies officially combined in 1949, becoming the Society of Actuaries (SOA).

The Conference of Consulting Actuaries (CCA) formed in 1950. Its members include actuaries working as consultants, regardless of whether they are SOA or CAS members. The conference was created to serve the unique needs of consulting actuaries, who were greatly outnumbered by insurance actuaries in the other organizations.

In the 1960s, the CAS formed a committee to explore

ways to encourage women to enter the profession. Like good statisticians, the first step they took was to assess the current proportion of women entering the profession. They were amazed to find that there were actually more women embroiled in the exam process than men at that time. Consequently, the purpose of the committee was revised to deal with minority issues.

Also during the 60s, both the CAS and the SOA began efforts to institute state recognition for actuaries. They discovered, however, that most states would not consider recognizing a subdivision of a profession. It was therefore necessary to put casualty and life actuaries under one roof. Thus was the American Academy of Actuaries (AAA) born in 1965. Besides licensing, the AAA provided a means to define and enforce through discipline the standards of the profession, something the individual societies had difficulty doing for legal reasons.

After the voluntary dissolution of the FAA in 1980, the actuarial profession was left with the following organizations (among others), each with a particular purpose: the CAS, to represent the property-casualty profession; the SOA, to support the life, health, and pension sectors; and the AAA, to oversee professional standards and licensing for all actuaries in the U.S.

Following are some key highlights from the history of actuaries in the U.S.:

- 1809** Jacob Shoemaker becomes the first practicing company actuary in North America (Philadelphia, PA).
- 1848** The Institute of Actuaries of Great Britain is formed in London.
- 1856** The Faculty of Actuaries is created in Scotland.
- 1889** The Actuarial Society of America (ASA) is founded by five actuaries and has 38 charter members.
- 1895** The ASA admits its first female member: Emma Warren Cushman (Boston, MA); European actuaries launch an international actuarial organization.
- 1896** The examination process for membership in the ASA is instituted.
- 1900** The first Fellow by examination is awarded.
- 1909** The American Institute of Actuaries (AIA) is formed.
- 1911** Workers compensation is created.
- 1914** The Casualty Actuarial and Statistical Society of America (CAS) is organized with 97 charter members.
- 1916** The Fraternal Actuarial Association is formed by actuaries of fraternal societies.

⇒ turn to page 7

History of U.S. Actuarial Organizations

from page 6

- 1929** Joint exams are offered by the ASA and the AIA.
- 1938** All exams through Fellowship are offered jointly between the ASA and the AIA.
- 1944** At the request of the War Manpower Commission, the Presidents of the ASA and AIA define “Actuary” for the U.S. government.
- 1949** The Society of Actuaries is created out of the merger of the ASA and the AIA.
- 1950** The Conference of Consulting Actuaries is formed.
- 1965** The American Academy of Actuaries (AAA) is founded.
- 1966** The American Society of Pension Professionals & Actuaries is formed.
- 1978** The film *The Billion-Dollar Bubble* is released, providing content for future Course on Professionalism lectures.
- 1980** The Fraternal Actuarial Association voluntarily dissolves.

Despite the large number of organizations throughout the history of the actuarial profession, relations between the societies were generally amicable. They cooperated regularly, and, when new or-

Resources & Reminders

Use the CAS website for:

- CAS *Syllabus of Basic Education* and updates
- “Verify Candidate Exam Status” to confirm that joint exams and VEE credits are properly recorded
- “Looking at the Exam Process” series
- Feedback button to the Candidate Liaison Committee
- Feedback button to the Examination Committee
- CAS Regional Affiliates news

EXAM REGISTRATION CONFIRMATION—If you have not received a confirmation of your registration for Exams 3L and 5-9 two weeks prior to the registration deadline, please contact the CAS Office.

ganizations were started, they were always clear about their respect for existing organizations and their intentions not to compete with them. While not always perfectly harmonious, the various societies generally got along well.

In comparison, today we have real competition, perhaps for the first time, which is all the more reason to look back on our history, to understand how these organizations have evolved and why, and to consult the past for advice on dealing with the future. **f**

Candidate Liaison Committee Mission

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, this committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions, and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees. Candidates may contact the Candidate Liaison Committee at the CAS office address. The Casualty Actuarial Society is not responsible for statements or opinions expressed in the articles, discussions, or letters printed in *Future Fellows*.



Future Fellows is published four times per year by the Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

Telephone: (703) 276-3100
Fax: (703) 276-3108

Email: office@casact.org
Website: www.casact.org

Presorted Standard postage is paid at Lanham, Maryland.

Candidate Liaison Committee:
Kendall Williams, FCAS, Chairperson
Dan Tevet, FCAS, Vice Chairperson
Gavin Brown-Jowett, FCAS
Charles Cervinka, ACAS
Kuda Chibanda, ACAS
James Englezos, ACAS
Heidi Givens, ACAS
Shira Jacobson, FCAS
Jill Labbadia, FCAS
Kari Palmer, ACAS
Katrina Redelsheimer, ACAS
Brian Suzuki, FCAS

Candidate Representatives:
Elie Bochner, ACAS
Elizabeth Demmon

Adina Erdfarb, ACAS
David McFarland
Kristen Schuk
Diana Zaidlin
Examination Committee Liaison to the Candidate Liaison Committee:
Arlene F. Woodruff, FCAS
CAS Admissions Manager:
Ashley Zamperini
CAS Examinations Coordinator:
Robert L. Craver
CAS Manager of Publications:
Elizabeth A. Smith
CAS Desktop Publisher:
Sonja Uyenco

Subscriptions to the newsletter are complimentary to CAS candidates who registered for a CAS Examination during the previous two years.

For information, please contact the CAS Office. Send all letters to the editor to the CAS Office address.

Postmaster: Please send all address changes to: The Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

For permission to reprint material, please write to the chairperson of the CAS Candidate Liaison Committee at the CAS Office address. The CAS is not responsible for statements or opinions expressed in the articles, discussions, or letters printed in this newsletter.

©2014 Casualty Actuarial Society
ISSN 1094-169-X

FSC LOGO

This Actuarial Life – Consulting

from page 5

Go Team!

Projects are typically worked on in teams, with analysts (typically actuarial students) and consultants (typically credentialed actuaries) working together with a consultant as the project lead. At least one credentialed actuary must sign each report. Some form of review process is usually involved as well, both to verify the accuracy of the calculations and the actuarial soundness of the work.

Aside from providing the report, consulting actuaries will meet with the client to review results, often working back and forth on various drafts before producing a final version. They make formal presentations to senior management and boards of directors. Overall they serve as trusted advisors to clients, often working with them for decades and contributing valuable insights and support to the clients' business.

On the Road

Consulting work has a reputation for being demanding when it comes to travel and hours. Unlike their insurance company counterparts, consultants must account for every hour of their time and meet goals for time spent on client work (billable

hours.) They also face travel demands. In some cases, projects require them to work on-site for weeks at a time. International travel may also be required. Many see this as a perk rather than a burden.

Other Duties As Assigned

Peppered in amongst the project work are various other responsibilities, chief among them being sales. Consulting actuaries must seek out new opportunities by responding to requests for proposals or RFPs as well as by developing and pitching unique project ideas to existing and potential clients. As consultants advance in their careers, they may take on management responsibilities as well. Others take the research and development path, focusing their efforts on producing specialized solutions and innovations.

Of course, like any career, there are many variations, but this brief overview should give you a better understanding of what it means to be an actuarial consultant day in and day out. Look to the next issue of *Future Fellows* for more insights into "This Actuarial Life." 