

FUTURE FELLOWS

September 2017, Volume 23, No. 3

Travel Time Report

By *Nick Schneider, ACAS*

I envy the candidates who pass all their exams on the first try, but I know plenty of candidates who inconsistently pass exams on the second, third, or eighth attempt. At the same time there are students who will earn their initial designations in their early 20s, late 20s, 30s or 40s, and possibly later.

In the midst of these combinations, the statistic that the CAS specifically tracks and has targets for is the number of years it takes a candidate to achieve CAS designations (ACAS or FCAS). This is referred to as “travel time.”

As with any analysis that contains a large amount of data, much of the time is spent going through the large CAS database of students and scrubbing the dataset. In order to calculate a candidate’s travel time the CAS looks at the date of first examination, as well as the date of first employment. Date of first examination is relatively easy to verify, as the CAS knows when you first signed up to take an exam. Date of first employment, however, is based on user input – your input. If, in your CAS profile, you have never filled out the date of your first employment, please stop reading and do this now – you will help improve the data quality for the next travel time analysis. (Update your CAS record by clicking on “My Profile” at the top of the CAS homepage.)


The CAS recently released an updated Travel Time Infographic using data compiled from the CAS membership database through August 2016. One goal of the analysis is to monitor how changes to the syllabus impact overall travel time and to ensure that the travel times overall are not changing too drastically due to these revisions. If any trends start to emerge in the data, the board may recommend that action be taken in order to ensure that travel time remains at a reasonable level and within employer expecta-

tions. These changes could include a possible reorganization of the syllabus, offering exams more frequently, or changing the format of how some of the topics are tested.

In 2002, the CAS Board of Directors established the following goal for travel time: The median time required to move from first fulltime actuarial employment to attainment of Fellowship should be in the range of 5-7 years.

The infographic shows that for the most recent years, this goal is being met. The most recent travel time data indicates that the median travel time from date of first employment to Fellowship is around 6.5 years (from date of first exam, it is around 8 years). For candidates who fall in the 25th percentile of exam takers, the travel time to Fellowship from date of first exam is currently just under 7 years. The date of Fellowship is considered to be the date of the meeting at which you are recognized as a Fellow, so in reality, for many people the actual time taking exams is about half a year less than this. In comparison, candidates who started taking exams in the late 1990s and early 2000s took, on average, three to nine months longer to complete the process based on first examination date. Travel time is down by more than one year from the level observed in the 1980s and early 1990s.

The second page of the travel time infographic displays a new statistic being introduced due to the increasing separation of the CAS and the SOA. It does not include preliminary exams; instead it will track the length of time from first CAS exam (usually Exam 5) to both designations.

Find the full infographic here: <http://www.casact.org/traveltime> and see an excerpt on the next page. 

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**INTRODUCTORY
PREDICTIVE MODELING**
December 5-6, 2017

**INTERMEDIATE
PREDICTIVE MODELING**
December 7-8, 2017

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**IN FOCUS SEMINAR: THE
ACTUARY OF TOMORROW**
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October 2-3 2017

**ERM FOR THE P&C
ACTUARY SEMINAR**
Chicago, IL
October 2-3 2017

ANNUAL MEETING
November 5-8, 2017

Time Travel Report

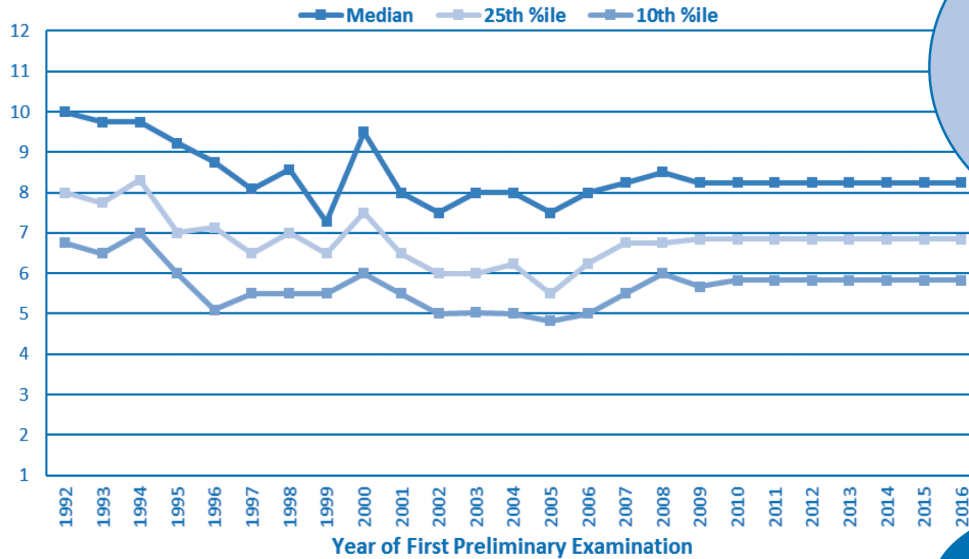
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2016 TRAVEL TIME ANALYSIS

What is Travel Time?

"Travel time" is a term used by the Casualty Actuarial Society (CAS) to denote the number of years it takes a candidate to achieve CAS designations (ACAS or FCAS). Although travel time is defined to start with the first date of full-time actuarial employment, the 2016 Analysis is compiled from data based on date from first examination to allow for a much larger data set.

FCAS: MEDIAN, 25TH AND 10TH PERCENTILE TIME FROM FIRST PRELIMINARY EXAMINATION TO DESIGNATION



Why Measure Travel Time?

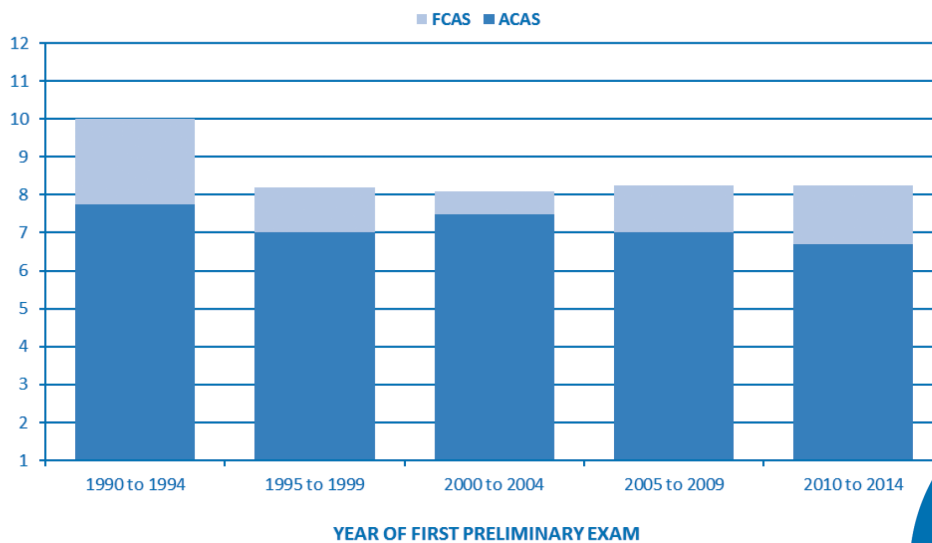
The CAS education system has undergone changes over the years with the intent of improving the quality of the process. The travel time analysis helps monitor the effects of the changes on admission rates.

THE CAS TRAVEL TIME GOAL

In 2002, the CAS Board of Directors established the following goal for travel time:

That the expectation for the median time required to move from the first full-time actuarial employment to attainment of Fellowship should be in the range of 5 to 7 years. This translates to 6.5 to 8.5 years from first PRELIMINARY examination.

PROJECTED MEDIAN TRAVEL TIME FROM FIRST PRELIMINARY EXAMINATION TO ACAS AND FCAS DESIGNATION



For the most recent years, we project a median travel time to Fellowship attainment:

- 6.5 years from 1st employment
- 8.25 years from 1st PRELIMINARY examination

Continuing Education — Know the Requirements

By Lucia Batista, ACAS and Celeste Bremen, Candidate Representative to the Candidate Liaison Committee

The actuarial field is changing fast! There are new technologies, analytics, and methodologies, which is why it is crucial for actuaries to continue their training. This process of learning extends beyond taking actuarial exams. Through continuing education (CE), actuaries can stay up-to-date with the changing industry.

Continuing Education by Country

The CAS Continuing Education Policy applies to all ACAS and FCAS members who provide actuarial services. The requirements depend on the country where the member practices.

Members who practice in the United States, Canada, United Kingdom, or Australia must meet the continuing education requirements of their national actuarial organization:

- United States – American Academy of Actuaries (AAA) Qualification Standard.
- Canada – Canadian Institute of Actuaries (CIA).
- United Kingdom – Institute and Faculty of Actuaries (IFoA) Continuing Professional Development (CPD) Scheme.
- Australia – The Institute of Actuaries of Australia (IAA) CPD Standard.

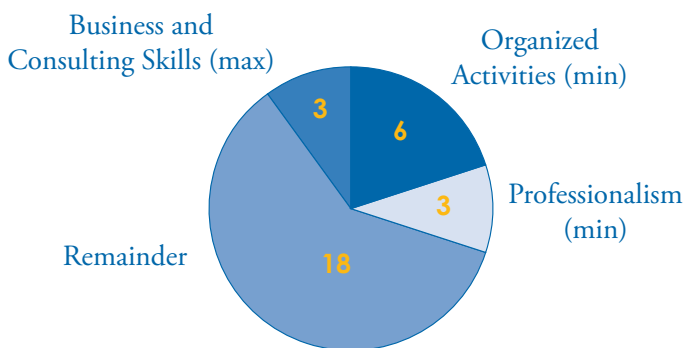
Alternatively, members who do not practice in the countries above must meet the continuing education requirements of the national actuarial organization most relevant to their practice.

Choose the appropriate standard that applies to you.

Recognized National Standards

IAA (Australia) requirements – hours can be allocated to different areas at the discretion of the actuary.

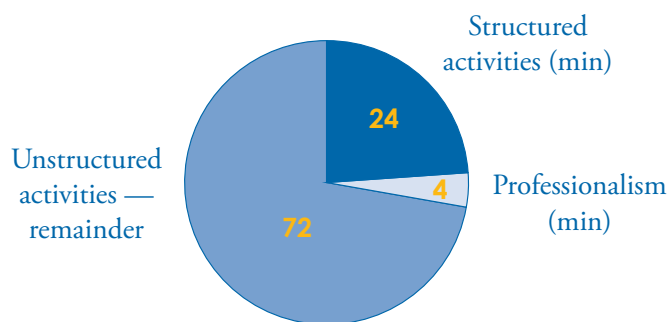
AAA (U.S.) - hours per year



AAA Requirements

- In the United States, the general requirement is **30 credit hours per year**, where 50 minutes counts for one credit hour.
- Organized Activities: minimum 6 hours.
- Professionalism: minimum 3 hours.
- Business and Consulting Skills: maximum 3 hours.
- If you sign regulatory opinions, at least 15 of the 30 hours must be categorized as “specific” (and 6 of the 15 specific hours must be “organized”).

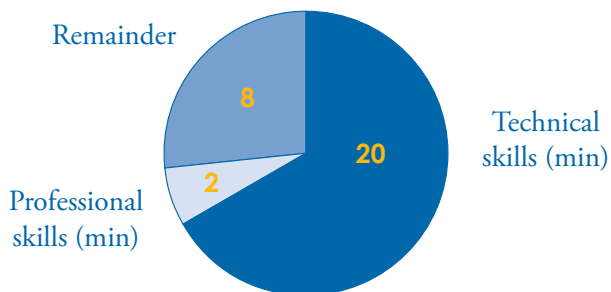
CIA (Canada) - hours per 2 years



CIA Requirements

- In Canada, members are required to complete **100 hours over the last two complete calendar years**.
- Structured activities: minimum 24 hours. At least 12 of these hours must be related to technical skills.
- Professionalism: minimum 4 hours, either structured or unstructured.
- Unstructured activities: the remaining hours.

IFoA (U.K.) - hours per year



IFoA Requirements

- In the U.K., members are required to complete at least **30 hours of CE per year**.
- Technical skills: minimum 20 hours. At least 10 of these hours must be obtained at an external event.
- Professional Skills Training: minimum 2 hours

IAA Requirements

Members are required to complete **100 points of CPD per calendar year** (or 200 points of CPD in aggregate over the previous two years, provided at least 50 points are completed in each year), regardless of practice area or full-time equivalency. Members may claim between 2 and 4 points per hour of CPD activity. The number of points which can be claimed is a matter for the member’s own professional judgment as to how much value the particular CPD activity has provided to the member or the profession.

Continuing Education

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Types of Continuing Education

To count as CE, the activity must be relevant to your job. According to the U.S. qualification standards, the activity should, “broaden and deepen your understanding.”

An activity is considered **organized/structured** when it involves interaction with actuaries or professionals from other organizations. For example, interactive exam preparation seminars or webinars count as organized credits. However, recorded webinars do not count as organized, since there is no opportunity for interaction with actuaries and professionals from other companies. Similarly, self-study time counts towards non-organized or unstructured credits.

The **professionalism category** requires addressing professional topics, such as Actuarial Standards of Practice (ASOPs) or ethics. Reading an ASOP, attending a session at a conference that reviews ASOPs, or listening to a webinar that discusses ASOPs would all be activities that earn credits towards this category.

Business and consulting skills refer to general business topics that help you effectively perform your job as an actuary. For example: business writing, presentation, people management, negotiation, persuasion, project management and leadership skills.

Document what you are counting!

Members must maintain a log of their continuing education activity, which is the only proof that will be required. The log should include:

- Date of the activity.
- Brief description of the activity.
- Sponsoring organization.
- Number of credits earned.
- Indication whether the credit was self-study or organized,
- Subcategory for which the credit applies (i.e., professionalism, job-relevant topics or business and management skills).

In addition, if you attend a CAS meeting, you should document what session you attended. It is recommended that you update your


log as you earn the credits to avoid forgetting some activities.

Keep your logs for at least six years, since the CAS might review it. Only a small percentage of members (1%) who have certified compliance will be reviewed each year, based on a random draw. In addition, all new members of the CAS Board of Directors and Executive Council will be reviewed during their first year.

If members are non-compliant, they cannot provide actuarial services. In order to resume their actuarial work, the members must first become compliant with the appropriate recognized national standard. Non-compliant members need not wait until the end of the year to change their compliance status. Members will be able to change their CE compliance status through the secure portion of the membership directory or by notifying the CAS Office that they are now compliant and requesting that the CE Heading be updated.

Where and when to certify compliance

Members certify compliance annually, either electronically through the CAS website or in writing by the end of each year. At the end of the year, you attest that you have complied with the continuing education requirements for that year, which enables you to practice in the following year. For example, at the end of 2017, the attestation year entered will be 2018, since you are attesting you have met the requirements for practicing in that year.

New members will first certify their compliance with this policy at the end of the calendar year during which they are admitted as members of the CAS. For example, if new members earn their ACAS in the spring of 2016 and are notified of the results in 2016, they are required to certify compliance with the CE policy by year-end 2016. However, if new members earn their ACAS in the fall of 2016 and are notified of the results in 2017, they are required to certify compliance with the CE policy by year-end 2017. New members are not required to earn CE hours in their year of admission unless required by the recognized national standard that they follow. 

Spring 2017 Examination Results

Exam	Number of Candidates	Number of Passing Candidates	Number Below 50% of Pass Mark (Ineffective)	Effective Pass Ratio
S	560	294	47	57.31%
5	783	338	37	45.31%
6 Canada	97	41	2	43.16%
6 United States	497	211	28	44.99%
7	829	399	25	49.63%
9	514	290	11	57.65%
C1	202	154	–	76.20%
C2	156	118	–	75.60%

The Unique Perspective of Multiple-Actuary Families

By John Klodnicki, Candidate Representative to the Candidate Liaison Committee

Relative to some other professions, like teacher, doctor, or engineer, the job of actuary seems like a modern idea. After all, there are many fewer actuaries despite it being ranked as one of the best careers in the world. However, the practice of actuarial science is not as young as it used to be. In fact, primitive versions of actuaries are as old as insurance itself, dating back to the seventeenth century. The Casualty Actuarial Society was founded in 1914, which set forth the principles that we follow today. Now that the actuarial profession has matured, there are many families that include multiple actuaries. The perspective of a mother, father, sibling or other relatives who are actuaries provides some unique insight into how being an actuary has changed among generations.

Personally, my exposure to actuarial science began at a very young age. My mother, Terry Klodnicki, was a practicing actuary while I was growing up, and seeing her work was what first interested me in the profession. Awareness of actuarial science, mom says, is one of the main differences between when she was starting her career and now. The first time she heard of an actuary was in college as a math major in the 1980s. Now, there are thousands of actuarial science majors who have wanted to be an actuary since high school or earlier. Another difference was that companies were hiring very many actuaries at that time; Terry Klodnicki was one of eighteen new hires at her first job.

The exam process was also different for mom than it is today. She did not take any exams while in college, and the first exam subject was calculus. When she started working as an actuary, Microsoft Excel was not yet released; instead the popular spreadsheet program was Lotus 1-2-3 (which she still insists was faster to use once the learning curve was overcome). However, much of the daily work of an actuary was similar to today, with the exception of predictive modeling, which was

not common due to the lack of computing power at that time.

Another interesting example of a multi-actuary family is Susan Hendricks and her daughters, Caitlin and Jessica. Susan's path to becoming an actuary was different, since she started taking exams later in life and made a career change. While she had heard about actuaries in school, it was not until a few years later that she decided to go in a new direction with her career. Susan recalls studying for exams at soccer practice, and even taking the long route in order to memorize flash cards at red lights. All the while, Caitlin and Jessica had a first hand view of how difficult it was to become an actuary, but also how much happier their mom seemed with her career.

Caitlin took her first actuarial exam in college and had an internship at her mom's company. Actually, Susan heard someone in her office giving a job offer on the phone, but had

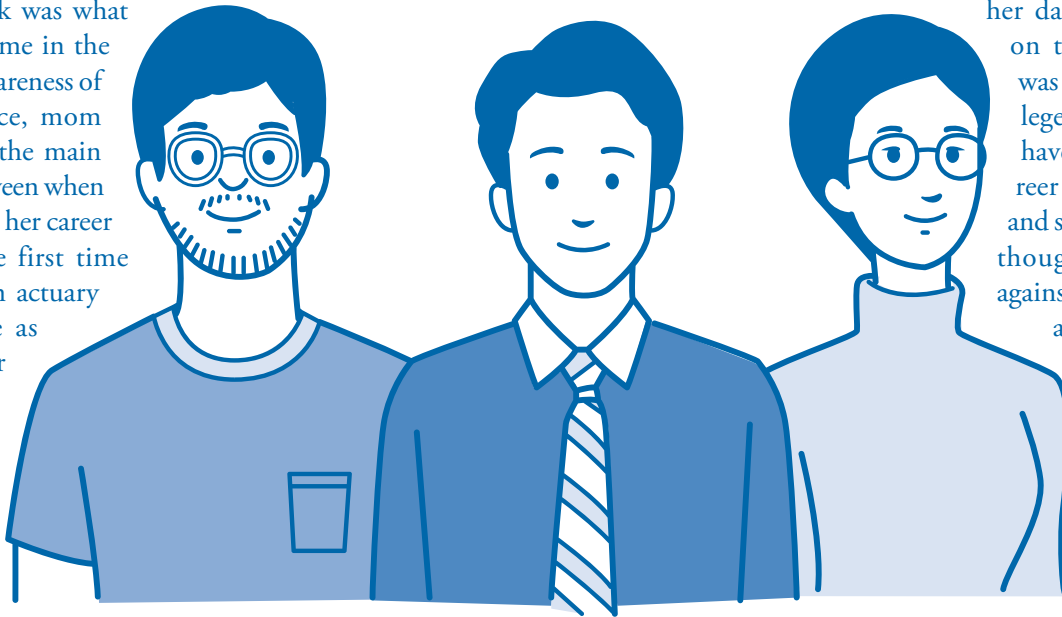
no idea that he was talking to her daughter.

Jessica, on the other hand, was pre-med in college and wanted to have a different career from her mom and sister. Eventually, though, she decided against medical school and started taking exams as well.

Though each had a unique path to an actuarial career, Caitlin and Jessica were grateful to have a mom

who knew what they were going through. She would help out in any way she could by cleaning their apartments or making dinners during exam season.

The fact that there are now so many second generation actuaries and multi-actuary families is a testament to the fulfillment and happiness that the profession provides. Caitlin, Jessica, and I each entered the actuarial field in our own way, but we all can agree that having a parent that can relate is an invaluable resource. Most importantly, we are very thankful for our families, and the knowledge and expertise that they hand down is a good start to a bright future for the actuarial profession. **f**



How Exam 8's New Study Note and the Syllabus Readings Process Were Updated

By Rachel Hunter, FCAS

Studying for more than one sitting of my final two CAS exams, I noticed a number of changes to the syllabus. At the time I was studying, there was a major change that involved renumbering of Exams 8 and 9 and shifting of the syllabus learning objectives related to profitability provision between exams. But another interesting thing occurs with the syllabus where learning objectives do not change but the associated readings do. I imagine both candidates and those who care about candidate education are curious about this process, so I reached out to a member of the Syllabus and Examination Committee (S&EC) who helped guide creation of the new Exam 8 study note to learn more about it.

In the case of the new Exam 8 study note, the decision to make a change had been in the works for several years. Although the learning objectives and knowledge statements in the syllabus were deemed to be up-to-date, the content used to familiarize candidates with the material was seen as needing an update. Section B of the Exam 8 syllabus included some core readings that were around 40 years old and did not contemplate a lot of today's more computer-reliant methodology. The syllabus for section B previously included more than ten authors represented across even more individual readings in this section. Since much of this material is new to candidates who have never had commercial lines roles, the learning curve could be steep. It was believed a consolidated voice and consistent notation (or narration/narrator), like we now see in the Exam 5 study materials, would further aid candidate understanding of the material. So a request was sent out to find a team willing to write a new study note to replace the older content.

The CAS commissioned a new study note to replace the majority of the readings for section B. The new study note is supplemented by selected chapters from the CAS Monograph "Distributions for Actuaries." Section B still requires candidates to read and understand ISO and NCCI experience and retrospective rating plans, but many smaller papers have their concepts absorbed into the larger study note. Creation of a new study note of this magnitude is no small job and the re-

sultant study note was contributed to by multiple authors with many years of experience in commercial lines pricing. The end product is that the Section B syllabus now consists of just the Study Note, the readings from the monograph and the three excerpts from ISO and NCCI.

The S&EC has an annual budget that allows it to commission new study materials when needed. The S&EC uses the budget wisely by prioritizing the need for updates, but it also reviews newly published material for appropriate readings to keep the syllabus relevant. The S&EC may also identify new readings published by the CAS or other organizations that fit in well with the exam syllabus. In 2016 Exam 8 experienced another major change to syllabus readings with the replacement of the Anderson GLM paper with the new GLM Monograph. CAS monographs have a different purpose than study notes commissioned by the S&EC. Monographs are designed to be practice

notes for the entire community; study notes are designed to introduce and educate candidates to a level of competency expected for newly credentialed actuaries. As such, study notes may require more background information and description of insurance mechanisms. With some introduction to GLMs now covered on Exam 5, the new GLM monograph was seen as appropriate for Exam 8.

In addition to keeping the syllabus up-to-date with modernized readings, the S&EC budget may also be used to commission study notes covering new learning objectives deemed appropriate for actuaries of the future or keeping up with the latest practice. Both 6U and 6C see frequent updates as regulations change over time. Existing texts, such as those used on Exam 5 and 6, may also be incrementally updated as needed. One way the S&EC identifies the need to update readings is through comments in the exam survey and feedback from those volunteering to write and grade the exams. If you are interested in helping shape this process, please take the time to comment on readings in your exam survey or by direct email to the S&EC or consider volunteering to help shape the syllabus for future actuaries after you finish your exams. [f](#)



Candidate Corner

By Elizabeth End, FCAS

Question: What do you like best about serving as a representative to the CLC?

“I like learning about topics that matter to me and other candidates. I enjoy the opportunity to dig into something in detail and then share that information with other candidates through the newsletter or the blog.”

—Agatha Caleo

“Being part of the CLC gives me the chance to collaborate with my fellow candidates who work in other parts of the country and for other companies. I enjoy learning from their experiences and working together to provide the candidate perspective to the CAS.”

—Celeste Berman

“My favorite part is getting to know the other members of the CLC through our meetings and collaboration on articles. It is very interesting to hear [about] the wide range of experiences, variety of actuarial roles and diverse geographies represented on the CLC.”

—John Klodnicki

The CAS Candidate Liaison Committee is looking for candidates taking CAS exams to join the committee as official candidate representatives. The selected candidates would be active participants on the *Future Fellows* editorial board. Please review the list of candidate requirements here: <http://www.casact.org/candidaterepresentative>.

To be considered for the position of candidate representative, **your application** and one letter of reference from a CAS member **must be received at the CAS Office by September 22, 2017**. The new representatives will be selected in October and would begin a two-year term in December.

“I admire the CLC’s commitment to providing candidates with a voice in the CAS. It’s important to ensure for the future generation of actuaries to play a key role in the strategic direction of the actuarial community.”

—Edgar Pal

“I have enjoyed working on a common goal with representatives from other companies, but the best part may have been the boxed lunches we got at our annual in-person meeting.”

—Nick Schneider 

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*.

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FSC LOGO

Fall 2017 is the last sitting that Exam S will be administered. Please familiarize yourselves with the 2018 transition rules.

The transition rules are simple: Any candidate with credit for Exam S achieved through an examination administered prior to January 1, 2018 will receive credit for MAS-I, and anyone with credit for Exam C achieved through an examination administered prior to July 1, 2018 will receive credit for MAS-II. 

2017 CAS Education Requirements to ACAS		2018 CAS Education Requirements to ACAS
Corporate Finance	→	Accounting and Corporate Finance
Economics	→	Economics
Exam 1* – Probability	→	Exam 1* – Probability
Exam 2* – Financial Mathematics	→	Exam 2* – Financial Mathematics
Exam 3F* – Models for Financial Economics	→	Exam 3F* – Investment and Financial Markets
Exam 4* – Construction and Evaluation of Actuarial Models	↔	Modern Actuarial Statistics I
Exam S – Statistics and Probabilistic Models	↔	Modern Actuarial Statistics II
Exam 5 – Basic Techniques for Ratemaking and Estimating Claim Liabilities	→	Exam 5 – Basic Techniques for Ratemaking and Estimating Claim Liabilities
Exam 6 – Regulation and Financial Reporting (Nation-Specific)- US, Canada, Taipei	→	Exam 6 – Regulation and Financial Reporting (Nation-Specific)- US, Canada, Taipei
Online Course 1 – Risk Management and Insurance Operations	→	Online Course 1 – Risk Management and Insurance Operations
Online Course 2 – Insurance Accounting, Coverage Analysis, Insurance Law and Insurance Regulation	→	Online Course 2 – Insurance Accounting, Coverage Analysis, Insurance Law and Insurance Regulation

Key:
Validation by Educational Experience (VEE)
Preliminary Exam
CAS Exam
CAS Online Course

*The CAS will honor credits from candidates who pass examinations offered by other organizations that cover our CAS learning objectives for CAS Exams 1, 2, and 3F as well as the VEEs. These organizations include: Society of Actuaries, Canadian Institute of Actuaries, Institute and Faculty of Actuaries (U.K.), Actuaries Institute (Australia), China Association of Actuaries, Actuarial Society of South Africa and Institute of Actuaries of India.