

2403

2404

2405

2406

2407

## V. Actuarial Communications

### Introduction

2408

2409

2410

2411

2412

Communications, as it relates to the actuarial profession, is a multi-faceted topic and plays an integral role in each of the other topics covered by this review. Without proper and effective communications, the actuarial profession cannot adequately serve the actuarial needs of the public or live up to its full potential.

2413

2414

2415

2416

2417

The topic covers communications between actuaries and the users of their services, as well as the general public. It embraces communications between the profession and the users of actuarial services, the general public, and the members of the profession. It includes the numerous forms of written, oral, and electronic presentations.

2418

2419

2420

2421

2422

2423

2424

Each of the five U.S.-based actuarial organizations, as well as the various offspring of the U.S. actuarial profession, devotes significant resources in terms of staff, volunteers, and finances in preparing, distributing, and presenting communications. The primary thrust of the profession's communication efforts has been directed at its members and selected segments of the public served by the profession, most notably legislators, regulators, and other professions.

2425

2426

2427

2428

2429

2430

In general, communications with the direct users of actuarial services and work products have been left largely to the individual actuaries who provide their services. Although some efforts have been made in the past to direct communications to the general public, usually such efforts have not been very effective, and the actuarial profession remains either unknown or something of an enigma in the eyes of the public.

2431

2432

2433

2434

2435

2436

2437

2438

There are numerous projects and activities currently underway by the actuarial organizations to improve communications directed at the users of actuarial services as well as at the general public. It is beyond the scope of this review to comment on these efforts individually, but the number and breadth of these activities show that the U.S. actuarial profession recognizes that improved communications can help it serve the public's actuarial needs by promoting better recognition and understanding of the profession.

2439

2440

2441

2442

Based on a review of the results of the CRUSAP surveys of actuaries and non-actuaries, the major issues relating to actuarial communications were classified under four broad headings:

2443

2444

2445

2446

2447

- Communications by actuaries to the users of their services;
- Understanding of actuaries, the actuarial profession, and actuarial work products by the users of actuarial services;
- Communication activities by the actuarial profession;
- Visibility of actuaries and the actuarial profession to the general public.

2448 The CRUSAP Task Force explored these issues in separate interviews conducted with a  
2449 number of current and former leaders of the actuarial profession and prominent non-  
2450 actuaries who have significant exposure to actuaries and the actuarial profession. These  
2451 interviews and the elaborations on the responses contained in the surveys provided  
2452 additional insight into these issues and offered a significant base of comments, examples,  
2453 and suggested approaches for dealing with these issues.

## 2454 **Analysis**

### 2455 **Communications by Actuaries to the Users of Their Services**

2456 The survey results provided an interesting insight into the differences between the way  
2457 actuaries and non-actuaries perceive actuaries' ability to communicate effectively with  
2458 the users of their services. Although the questions were worded somewhat differently in  
2459 the two surveys, 75 percent of the actuaries responding felt that the users of their services  
2460 had a reasonable or better understanding of the nature of actuarial services, including the  
2461 inherent uncertainty of actuarial conclusions, while only 55 percent of non-actuaries felt  
2462 actuaries did an acceptable job of communicating the nature of actuarial work and its  
2463 inherent limitations. A significant majority of those individuals interviewed, both  
2464 actuaries and non-actuaries, felt the need to improve the communication skills of  
2465 actuaries in order to better deal with the users of their services.

2466  
2467  
2468 Effective communication of the nature of actuarial work, its inherent limitations, and the  
2469 uncertainty associated with the result is difficult. Actuarial work is frequently quite  
2470 complex, using highly specialized mathematical and statistical concepts, arrays of  
2471 assumptions, manipulation of volumes of data, and sophisticated computer modeling.  
2472 Some of these concepts are not easily explained in simple, understandable language, and  
2473 there is a tendency for some actuaries to lapse into the use of actuarial jargon and  
2474 technical terms (actuarialese) when communicating with laypersons.

2475  
2476 By the very nature of the mathematical underpinnings of actuarial science, the profession  
2477 tends to attract individuals that psychological testers classify as being "thing oriented" as  
2478 opposed to "people oriented." This may, in part, contribute to some actuaries' having less  
2479 highly developed oral communication skills. An excellent work product, poorly  
2480 communicated, may well be perceived as a poor work product.

2481  
2482 Admittedly, the users of actuarial services may not be the most receptive audience. A  
2483 number of the respondents cited the limited mathematical skills among some users,  
2484 making it difficult for them to understand such basic concepts as simple statistical  
2485 measures, let alone loss development methodologies and stochastic processes. Another  
2486 problem frequently noted was that some users are interested only in the answers and want  
2487 to avoid getting bogged down in the details. However, these difficulties should serve to  
2488 sharpen the focus on how the actuary's communication skills might be improved.

2489  
2490 A natural adjunct to better actuarial communication skills is an understanding by the  
2491 actuary of the business operations and needs of the users of actuarial services. The  
2492 appropriateness of the actuary's work in meeting the needs of the users is significantly  
2493 enhanced if the actuary is familiar with the differing needs of specific users.

2494 If actuaries could increase their communication skills, the users of actuarial services  
2495 would be better served and they would have more respect for actuaries and the actuarial  
2496 profession. Numerous suggestions have been offered on how communication training  
2497 might be undertaken, including:

- 2498
- 2499 • Requiring such training at the academic level as a prerequisite to credentialing;
- 2500 • Adding such training to the syllabus of the examinations leading to
- 2501 credentialing;
- 2502 • Making such training a part of an expanded pre-Fellowship and/or pre-
- 2503 Associateship training program (e.g., the Fellowship Admissions Course
- 2504 and the Associate Professionalism Course of the Society of Actuaries);
- 2505 • Giving credit for such training as a part of a continuing education program or
- 2506 requiring a minimum of such credits periodically.
- 2507

2508 **Understanding of Actuaries, the Actuarial Profession, and Actuarial Work Products**  
2509 **by the Users of Actuarial Services**

2510 Both actuary and non-actuary survey respondents and interviewees generally agreed that  
2511 many users of actuarial services don't adequately understand the inherent variability and  
2512 uncertainty of actuarial opinions and projections. Such a lack of understanding was  
2513 regarded as one of the most significant communication problems the actuarial profession  
2514 currently faces. It has frequently resulted in unintended and unrealistic expectations on  
2515 the part of users; if and when adverse results develop, users tend to be dissatisfied and  
2516 distrust individual actuaries and the profession. Too frequently, point estimates are  
2517 assumed to be gospel and ranges are taken to be ironclad boundaries. At the same time, it  
2518 was felt that placing too much emphasis on the variability of actuarial results could  
2519 undermine the perceived value of actuarial services in the eyes of the users.

2520

2521 Users of actuarial services often fail to appreciate the constraints placed on actuaries and  
2522 their work products by professional standards, regulations, accounting requirements, and  
2523 the potential for litigation. Regulators in particular frequently fail to appreciate fully the  
2524 professionalism of actuaries.

2525

2526 Users also fail to comprehend the magnitude of data, assumptions, and the work that may  
2527 go into producing a single value or range of values. There is too frequently the  
2528 assumption that actuarial results derive from a "black box" at the push of a button,  
2529 without any actuarial input or judgment.

2530

2531 Some users equate actuarial work, which deals with developing values that reflect the  
2532 economic effect of future contingent events, with accounting work, which deals with the  
2533 developing values based on currently existing amounts. They expect a degree of  
2534 exactitude that is neither intended nor possible. Users need to understand that actuarial  
2535 work products are different from accounting; they are financial assessments of future  
2536 risks as opposed to expected gains or losses.

2537

2538 It was also noted that some actuaries fail to communicate adequately how their services  
2539 and work products might be best utilized by their clients in evaluating alternatives,

2540 monitoring operations, and making sound business decisions. In such cases, the value of  
2541 the actuarial services fails to attain its full potential and neither the client nor the actuarial  
2542 profession is well served.

2543

2544 Both actuaries and non-actuaries appear to agree that the actuarial profession would  
2545 benefit from an increased effort on the part of the profession in educating the users of  
2546 actuarial services about actuaries and their work products,

2547

2548 **Communication Activities by the Actuarial Profession**

2549 The U.S. actuarial profession, through the five actuarial membership organizations, The  
2550 Actuarial Foundation, the Actuarial Standards Board, the Actuarial Board for Counseling  
2551 and Discipline, the local and regional actuarial clubs and forums, and other organizations,  
2552 undertakes a vast array of communication activities directed at the groups' membership  
2553 and/or various segments of the public.

2554

2555 In terms of printed communications, these organizations currently prepare and distribute  
2556 numerous journals, magazines, yearbooks, newsletters, committee and task force reports,  
2557 white papers, monographs, comment letters, discussion papers, professionalism  
2558 standards, practice notes, study notes, other education materials, manuals, brochures,  
2559 press releases, *amicus curiae* briefs, and other documents.

2560

2561 Oral communications are disseminated through presentations at regional and national  
2562 meetings of the membership organizations and local and regional actuarial clubs and  
2563 forums; seminars; testimony; hearings; television and radio interviews; meetings with  
2564 regulators, legislators, and their staffs; and meetings with other professionals.

2565

2566 In addition, extensive use is made of postings on the many websites operated by these  
2567 organizations, audiocasts, webcasts, telecasts, e-mails, tape recordings, CDs, DVDs, and  
2568 other forms of electronic communication.

2569

2570 It is virtually impossible to catalogue all of these communication activities, let alone  
2571 comment on them individually.

2572

2573 In general, the profession gets high marks for its communication efforts directed at the  
2574 U.S. Congress, federal regulatory organizations, the National Association of Insurance  
2575 Commissioners, and the accounting profession. However, there were a number of  
2576 comments, observations, and suggestions that emerged from the survey, interview  
2577 responses, and subsequent research that are worth noting.

2578

2579 • There is a significant duplication of effort and expense in the vast array of  
2580 communications currently emanating from the various actuarial  
2581 organizations.

2582

2583 • Some of the effectiveness of the profession's communication efforts is lost  
2584 because users perceive the profession as unable to speak with a single  
2585 voice.

2586  
2587  
2588  
2589  
2590  
2591  
2592  
2593  
2594  
2595  
2596  
2597  
2598  
2599  
2600  
2601  
2602  
2603  
2604  
2605  
2606  
2607  
2608  
2609  
2610  
2611  
2612  
2613  
2614  
2615  
2616  
2617  
2618  
2619  
2620  
2621  
2622  
2623  
2624  
2625  
2626  
2627  
2628  
2629  
2630  
2631

- Actuaries typically receive more communications from the profession than they can effectively use.
- Many users of actuarial services, as well as the general public, are either not aware of, or fail to make effective use of, the full range of communications made available by the actuarial profession.
- While the actuarial organizations have developed numerous websites as effective communication vehicles, they are, for the most part, directed at their memberships and are not necessarily easy for non-actuaries to navigate. (Nor are they for some actuaries.) The available material is of little interest, of no benefit, or too technical for non-actuaries.
- The profession would benefit by initiating some new communication efforts aimed at addressing the perceived problems of certain classes of users of actuarial services.

The duplication of effort and expense and the failure to speak with a single voice are largely attributable to the current structure of the U.S. actuarial profession and are addressed more fully in Section VI.

It has been said that while actuaries are bright, they don't read. This bit of hyperbole does address a real issue. Because actuaries tend to work under extreme time pressures and have such a large volume of technical material and regulations to keep abreast of, they frequently don't have enough time to read many of the communications the profession directs to them. So it should come as no surprise that many actuaries and non-actuaries are unaware of many of the profession's current communication activities. In several instances, respondents suggested initiating communication efforts that were already being performed.

One area where it was felt that the profession might benefit from a targeted communication effort would be to better educate users of actuarial services, especially regulators, as to the actuarial professionalism standards (conduct, qualification, and practice) and the actuarial counseling and discipline system.

Another area of potential benefit would be in educating users of actuarial services in some of the more technical aspects and uses of actuarial work and how to make better use of actuaries by giving appropriate recognition and consideration to the actuarial communications and advice that are available to management for planning and decision-making purposes. One approach would be to develop easy-to-understand brochures on such topics as the uncertainty inherent in actuarial estimates and projections, a comparison of various pension funding methods, the responsibilities of the appointed actuary, and cash flow testing.

Another approach might be for the profession to offer instructional seminars for specific classes of users aimed at providing a better understanding of the actuarial work

2632 performed in their area and how to use it. Such users might, for example, include  
2633 insurance company directors and pension plan trustees.

2634

2635 **Visibility of Actuaries and the Actuarial Profession With the General Public**

2636 The general public does not seem to know very much about the actuarial profession or  
2637 appreciate what actuaries do or are capable of doing. While public understanding may be  
2638 greater than it was in the past, it still remains at a level far below an understanding of the  
2639 work of other professions such as law, accountancy, and medicine. It also lags behind  
2640 that found in some other countries.

2641

2642 In part, this lack of recognition stems from the relatively small size of the U.S. actuarial  
2643 profession, the highly specialized and technical nature of its work, and its fragmented  
2644 structure. Further, unlike the case with other professions, members of the general public  
2645 do not usually have reason to use the services of actuaries directly, as they might those of  
2646 lawyers, accountants, or physicians.

2647

2648 Arguments have been presented on both sides of the issue as to whether the profession  
2649 should take specific actions to increase its visibility with the general public. On the one  
2650 hand, a number of respondents felt that because of the profession's size and limited  
2651 resources, any communication efforts directed at educating segments of the public might  
2652 be more profitably employed by targeting direct users of actuarial services. A frequently  
2653 encountered reaction was that the general public doesn't know much about actuaries and  
2654 "really doesn't care." A number of respondents felt that there was no advantage to be  
2655 gained by increasing the profession's visibility with the general public since the public  
2656 does not directly employ actuaries.

2657

2658 On the other hand, some felt that since the profession has a responsibility to the general  
2659 public, increasing public awareness of the profession would better position it to respond  
2660 to the public's needs. As the actuarial profession seeks to apply its skill sets in non-  
2661 traditional areas, greater professional visibility might result in more prospective  
2662 employers seeking out the services of actuaries to fill their risk management needs rather  
2663 than turning to other experts with greater visibility, such as MBAs, accountants, and  
2664 economists. A recent survey conducted by the Society of Actuaries in connection with a  
2665 report on opportunities for the actuarial profession found that only 7 percent of Wall  
2666 Street professionals knew why they would want to talk to an actuary. Also, some felt that  
2667 a higher visibility among the general public might attract more qualified candidates to the  
2668 profession.

2669

2670 The most frequently suggested approach to increasing the visibility of the profession,  
2671 while at the same time serving a recognized need of the general public, was for the  
2672 profession to prepare communications aimed at the general public and designed to  
2673 explain the actuarial aspects of current national issues, such as Social Security, Medicare,  
2674 and pension reform. Even though the profession has already undertaken several such  
2675 efforts, which have been reported by the media, they apparently have gone relatively  
2676 unnoticed by the public and members of the profession.

2677

2678 Alternatively, a number of respondents believed that a better way to increase the general  
2679 public's awareness of the profession would be for individual actuaries to become versed  
2680 in the actuarial aspects of the important national issues and to take every opportunity to  
2681 address them at non-actuarial meetings, in letters to the editor, and in discussions with  
2682 friends and associates.

2683  
2684 Finally, several survey respondents felt that the profession would gain greater recognition  
2685 and stature if it took public stands on certain issues, rather than just providing impartial  
2686 analysis to decision-makers. In particular, such stands would be taken when proposed  
2687 legislation was deemed, from an actuarial perspective, to be seriously flawed or not in the  
2688 public interest. A number of the interviewees felt that, while this might be a good idea,  
2689 they questioned the profession's ability to secure a consensus on the issue in a timely  
2690 manner, if at all.

2691

## 2692 **Conclusions**

2693

2694 Based on a review of the comments, observations, and suggestions made by the survey  
2695 responders and interviewees, the input and guidance received from the Advisory Panel,  
2696 the available literature, and additional research, the CRUSAP Task Force feels that the  
2697 following conclusions best summarize the most important actuarial communication  
2698 issues:

2699

2700 1. The oral and written communication skills of actuaries, which are critical to users'  
2701 proper understanding and utilization of the actuary's services and work products, are in  
2702 definite need of improvement. If actuaries could improve these communication skills,  
2703 there would be fewer misconceptions and misunderstandings, a greater appreciation of  
2704 actuaries and actuarial services, and an improved atmosphere to allow the actuary to  
2705 better serve the needs of the user and the public.

2706

2707 2. Direct and indirect users of actuarial services do not adequately understand the  
2708 variability and uncertainty inherent in the opinions and projections of actuaries. The  
2709 CRUSAP Task Force viewed this as one of the most serious problems facing the actuarial  
2710 profession. This lack of understanding frequently leads to unwarranted expectations on  
2711 the part of users of the actuarial work product, resulting in disappointments, criticism,  
2712 and a feeling that actuaries and actuarial skills are not adequate to the tasks. In some  
2713 instances, this lack of understanding may lead to unwarranted litigation. This is an area  
2714 that needs to be addressed not only by the individual actuary but also by the profession.  
2715 In addressing this area, the profession must be careful not to place so much emphasis on  
2716 the uncertainty of actuarial work as to demean the value of actuarial services.

2717

2718 3. Many users of actuarial services do not adequately understand and appreciate the  
2719 abilities of actuaries, their education and training, their professionalism, and the standards  
2720 and discipline procedures to which they are subject. Communication efforts in these areas  
2721 need to be directed to all users of actuarial services, but professionalism, standards, and  
2722 discipline procedures should receive particular emphasis in communications addressed to  
2723 regulators.

2724 4. The communication activities of the profession, while significant in scope and  
2725 activity, are not as well directed and effective as they might be. To a significant  
2726 extent, this may be attributed to the large number of actuarial entities engaged in  
2727 the process without any consistent, overall planning and coordination among  
2728 them. As a result, many identifiable needs of users of actuarial services are not  
2729 currently being met.

2730

2731 5. The actuarial profession continues to have extremely low visibility with the  
2732 general public. The CRUSAP Task Force recognizes that the limitations imposed  
2733 by its size, resources, and areas of greater priority prevent the actuarial profession  
2734 from making a concerted effort to educate the general public about the profession  
2735 and what actuaries are capable of. It does believe that any efforts expended in this  
2736 area, especially if they can be tied to other communication activities, would  
2737 benefit the profession. Such efforts would facilitate the profession's entrée into  
2738 non-traditional areas, attract more qualified candidates to actuarial careers, and  
2739 enable the profession to better serve the needs of the general public.

2740

## 2741 **Recommendations**

2742

2743 Based on a review of the foregoing and recognizing the practicality of implementation,  
2744 the following detailed recommendations are suggested for the actuarial profession to  
2745 consider. Some of the recommendations address elements of more than one of the  
2746 conclusions, and some conclusions are addressed by more than one recommendation. The  
2747 order of these recommendations is not intended to reflect their perceived importance by  
2748 the Task Force.

2749

2750 1. The actuarial profession should require training and/or demonstrated  
2751 proficiency in communication skills as part of the basic education of  
2752 actuaries leading to their credentialing. Such training and demonstrated  
2753 proficiency include both oral and written communication skills.

2754

2755 While the implementation of such a requirement would need a good deal  
2756 of investigation and planning, some additional comments and suggestions  
2757 are offered:

2758

2759 a. It would be desirable to require both basic and technical  
2760 communication skills.

2761

2762 b. The training in basic oral and written communication skills could  
2763 be satisfied by requiring the successful completion of appropriate  
2764 speech and composition courses at the academic level.

2765

2766 c. Not all academic institutions offer training in technical  
2767 communications, and those that do usually restrict their  
2768 offerings to technical report writing.

2769

2770  
2771  
2772  
2773  
2774  
2775  
2776  
2777  
2778  
2779  
2780  
2781  
2782  
2783  
2784  
2785  
2786  
2787  
2788  
2789  
2790  
2791  
2792  
2793  
2794  
2795  
2796  
2797  
2798  
2799  
2800  
2801  
2802  
2803  
2804  
2805  
2806  
2807  
2808  
2809  
2810  
2811  
2812  
2813  
2814  
2815

- The requirement for technical writing skills might be satisfied by including the topic in the actuarial examination syllabus materials; proficiency would be tested by essay examination.
- Training in technical oral communication skills might be accomplished through required participation in activities such as Toastmasters clubs. Negotiations to this end are currently underway between the Society of Actuaries and Toastmasters International, with the intention of establishing chapters specifically for actuaries and others involved in financial services.

2. The profession should develop and encourage continuing education training in communication skills.

- a. The continuing education requirements of the Qualification Standards should allow credit for such continuing education activities. The continuing education requirements in the current Qualification Standards, and in the most recent exposure draft of the proposed revisions, do not allow for such credit.
- b. Ideally, the continuing education requirements should mandate some minimum number of hours, devoted to periodically maintaining and enhancing communication skills. Recent changes to the Canadian Institute of Actuaries' continuing education requirements have a minimum requirement in the areas of business management, communications, and professionalism.

3. The U.S. actuarial organizations should develop an effective structure for coordinating communication activities, monitoring the information needs of the public, and establishing priorities. Not only will this better utilize the profession's limited resources, but it will also be a step in the right direction of allowing the profession to speak, if not with a single voice, at least with fewer voices.

Among the priorities to be addressed are:

- a. The education of all users of actuarial services on the inherent uncertainty of actuarial estimates and projections. Possible approaches include:
  - Developing brochures that explain this concept in consistent, understandable, layman's terms.
  - Preparing articles for *Contingencies* and the pension and insurance trade press that address this issue.

- 2816
- 2817
- 2818
- 2819
- 2820
- 2821
- 2822
- 2823
- 2824
- 2825
- 2826
- 2827
- 2828
- 2829
- 2830
- 2831
- 2832
- 2833
- 2834
- 2835
- 2836
- 2837
- 2838
- 2839
- 2840
- 2841
- 2842
- 2843
- 2844
- 2845
- 2846
- 2847
- 2848
- 2849
- 2850
- 2851
- 2852
- 2853
- 2854
- 2855
- 2856
- 2857
- 2858
- 2859
- 2860
- 2861
- Developing program presentations and providing speakers for meetings of interested user groups.
  - b. The education of specific classes of users of actuarial services, such as insurance company directors and pension committees, in order to provide a better understanding and appreciation of the actuarial work products and responsibilities as they apply to their areas.
  - c. The education of regulators, especially insurance commissioners, on the professionalism standards and disciplinary system to which actuaries are subject and how to deal with what they perceive as inappropriate work by an actuary.
4. The actuarial profession should investigate retaining a firm specializing in professional organization communications to perform a study of the current communication activities of the U.S. actuarial organizations and their offspring. The study would have the following objectives:
- a. Identify the duplication in communications among the various organizations.
  - b. Examine the degree to which various audiences are making appropriate use of the communications directed at them.
  - c. Compare the actuarial profession's communication vehicles, methods, and effectiveness with those of other professions.
  - d. Develop a suggested plan for the implementation of an integrated communication program for the profession to identify, prioritize, and meet the needs of the profession, its membership, and its various publics.
- Create an appropriate understanding of actuarial work products, their uses, and their value among current and prospective users of actuarial services,
  - Educate the users of actuarial services about the inherent uncertainty of actuarial work products in a way that avoids any negative connotation,
  - Provide regulators with a better appreciation of the skill sets and professionalism that actuaries bring to bear, including the profession's standards and discipline procedures, and its procedures for dealing with suspected poor performance.
  - Emphasize the image of the U.S. actuarial profession as an entity as opposed to the multiple organizations it encompasses.
5. The U.S. actuarial profession should investigate development of a nonpartisan

- 2862 website devoted exclusively to the users of actuarial services, potential users of  
2863 actuarial services, and the general public. The website should:
- 2864
- 2865 a. Be user-friendly, highly intuitive, and employ easily understood  
2866 language.
- 2867
- 2868 b. Identify itself as being a development of the U.S. actuarial  
2869 profession as an entity, without focusing on the multiplicity of  
2870 individual organizations.
- 2871
- 2872 c. Provide information that might be of interest to the various segments of the  
2873 actuaries' public. This includes:
- 2874
- 2875 • the education and training of actuaries;
  - 2876
  - 2877 • the structure of the actuarial profession;
  - 2878
  - 2879 • a description of actuarial credentials;
  - 2880
  - 2881 • areas of actuarial expertise;
  - 2882
  - 2883 • traditional and non-traditional applications of actuarial  
2884 services;
  - 2885
  - 2886 • actuarial professionalism standards and the discipline  
2887 process;
  - 2888
  - 2889 • a description of actuarial work products;
  - 2890
  - 2891 • an explanation of actuarial terminology;
  - 2892
  - 2893 • positive explanations of the uncertainty that attaches to  
2894 actuarial estimates and opinions, including what point  
2895 estimates and ranges are intended to convey;
  - 2896
  - 2897 • descriptions of responsibilities imposed on actuaries by  
2898 laws and regulations; and
  - 2899
  - 2900 • explanations of national issues having actuarial aspects,  
2901 such as Social Security, Medicare, and pension reform.
  - 2902
- 2903 d. Provide a description of, and linkage to, the relevant areas on the  
2904 websites established by the actuarial organizations and their  
2905 offspring.
- 2906
- 2907 e. Be widely publicized.
- 2908