Fall 2014 and Spring 2015 Exam 6–United States Syllabus

The syllabus for this four-hour exam is defined in the form of learning objectives, knowledge statements, and readings. The syllabus covers the Fall 2014 and Spring 2015 exams.

**LEARNING OBJECTIVES** set forth, usually in broad terms, what the candidate should be able to do in actual practice. Included in these learning objectives are certain ones that may not be possible to perform on an examination, such as complex simulations, but that the candidate would still be expected to explain in an examination setting.

**KNOWLEDGE STATEMENTS** identify some of the key terms, concepts, and methods that are associated with each learning objective. These knowledge statements are not intended to represent an exhaustive list of topics that may be tested, but they are illustrative of the scope of each learning objective.

**READINGS** support the learning objectives. It is intended that the readings, in conjunction with the material on the lower numbered examinations, provide sufficient resources to allow the candidate to perform the learning objectives. Some readings are cited for more than one learning objective. The Syllabus and Examination Committees emphasize that candidates are expected to use the readings cited in this Syllabus as their primary study materials.

Thus, the learning objectives, knowledge statements, and readings complement each other. The learning objectives define the behavior, the knowledge statements illustrate more fully the intended scope of the learning objectives, and the readings provide the source material to achieve the learning objectives. Learning objectives should not be seen as independent units, but as building blocks for the understanding and integration of important competencies that the candidate will be able to demonstrate.

Note that the range of weights shown should be viewed as a guideline only. There is no intent that they be strictly adhered to on any given examination—the actual weight may fall outside the published range on any particular examination. The overall section weights should be viewed as having more significance than the individual learning objective weights. Over a number of years of examinations, absent changes, it is likely that the average of the weights for each individual overall section will be in the vicinity of the guideline weight. For the individual learning objective weights, such convergence is less likely. On a given examination, in which it is very possible that not every individual learning objective will be tested, there will be more divergence of guideline weights and actual weights. Questions on a given learning objective may be drawn from any of the listed readings, or a combination of the readings. There may be no questions from one or more readings on a particular exam.

After each set of learning objectives, the readings are listed in abbreviated form. Complete text references are provided at the end of this exam syllabus.

Items marked with a bold SK or SKU constitute the Fall 2014-Spring 2015 Exam 6-United States Study Kit that may be purchased from the CAS Online Store. The 2014 and 2015 Update to the 2013 Study Kit includes only the new items marked with a bold SKU; the Update may be purchased from the CAS Online Store. Items marked with a bold OP (Online Publication) are available at no charge and may be downloaded from links in the Complete Text References webpage.

Please check the “Syllabus Updates” section of the CAS Web Site for any changes to the Syllabus.

Section A of this examination covers insurance regulation with regards to property-casualty coverages, ratemaking, pricing, and solvency, and U.S. tort law as it affects the property-casualty business. Section B covers markets, coverages, and private and governmental programs for the property-casualty business in the United States. Section C covers the aspects of statutory, Generally Accepted Accounting Principles (GAAP), and International Financial Reporting Standards (IFRS) insurance accounting and taxation as these affect reserving and statutory reporting in the United States. Section D covers the professional responsibilities of the appointed actuary according to the Property...
and Casualty Annual Statement Instructions issued by the National Association of Insurance Commissioners (NAIC). Section E presents the general concepts of reinsurance accounting to the candidate.

The candidate may wish to review the sections of CAS Online Course 2 on Insurance Accounting, Insurance Law, and Insurance Regulation as background for the exam.

### A. Regulation of Insurance and United States Insurance Law

Range of weight for Section A: 15-25%

Candidates should understand that insurers are regulated by various governmental agencies because insurance is a valuable public service. An understanding of the dual U.S. state and federal regulatory system is required, along with the various state systems of regulation. The major areas of regulation for rate, contract terms, and solvency should be understood, as should the role of antitrust law as it pertains to insurance regulation.

Regulation as it affects insurance ratemaking in the U.S. is covered. Regulatory and political aspects of risk classification are also covered. Some learning objectives extend the topic to regulation and governmental actions designed to enhance the availability of insurance.

This section also covers the regulation for solvency in the U.S., including financial ratios tested by the National Association of Insurance Commissioners, Insurance Regulatory Information System (IRIS) tests and guaranty fund mechanisms set up by the various states. Also covered are risk-based capital calculations from the statutory blank and how they are used to monitor solvency.

U.S. tort law, while not a strictly actuarial subject, affects many areas of an actuary’s work. The judicial role in the development of tort law is also covered.

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>KNOWLEDGE STATEMENTS</th>
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</table>
| 1. Describe the historic development and the current state of insurance regulation. Range of weight: 3-7 percent | a. Basis of insurance regulation  
b. Functions of NAIC  
c. Antitrust provisions  
d. Rate regulation |

<table>
<thead>
<tr>
<th>READINGS</th>
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| Harrington  
| Kucera  
| McCarty  
| NAIC Solvency Regulatory Framework  
| Porter 1  
| Wagner |

<table>
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<tr>
<th>LEARNING OBJECTIVES</th>
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| 2. Discuss the historic development of solvency regulation; describe current programs used to monitor solvency. Range of weight: 3-7 percent | a. NAIC accreditation program  
b. Solvency, including RBC, insolvency, insurance department examination, and NAIC regulatory tests such as IRIS  
c. Company licensing  
d. Receivership  
e. SEC reporting and regulation |
### LEARNING OBJECTIVES

#### KNOWLEDGE STATEMENTS

| 3. Describe current regulation addressing specialized insurance topics. | a. Surplus Lines Companies  
b. Risk Retention Groups and Purchasing Groups  
c. Captives  
d. Admitted vs. Non-admitted Companies  
e. Rating Agencies |
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<tbody>
<tr>
<td>Range of weight: 0-5 percent</td>
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### READINGS

- Odomirok et. al  
- NAIC IRIS  
- NAIC Solvency Regulatory Framework  
- Porter 1  
- Porter 2

### LEARNING OBJECTIVES

#### KNOWLEDGE STATEMENTS

| 4. Discuss the issues, outcome, rationale, and implications of landmark decisions and antitrust laws for the insurance industry including the division of responsibility between federal and state regulators. | a. Federal and State Antitrust Laws (e.g. Sherman Antitrust)  
b. McCarran-Ferguson  
c. Southeastern Underwriters  
d. Dodd-Frank Act  
e. Gramm Leach Bliley Act  
f. Paul vs. Virginia |
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<tbody>
<tr>
<td>Range of weight: 3-7 percent</td>
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### READINGS

- Feldblum (Rating Agencies)  
- GAO Report  
- Mayer Brown  
- NAIC Solvency Regulatory Framework  
- Porter 1  
- Vaughan (Economic Crisis)

### LEARNING OBJECTIVES

#### KNOWLEDGE STATEMENTS

| 5. Describe the U.S. litigation environment as applied to insurance. | a. Ways regulators and insurers respond to these trends, e.g., policy language changes, new statutory requirements  
b. Mass torts (e.g., asbestos) and class action suits  
c. Role and influence of expert testimony and new theories/scientific findings in the U.S. tort system  
d. Judicial decisions that affect damages |
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<td>Range of weight: 0-5 percent</td>
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### READINGS

- Asbestos  
- RAND
B. Government and Industry Insurance Programs

Range of weight for Section B: 10-20 percent

This section focuses on the identification of major United States insurance programs administered by government agencies and insurance industry organizations. The candidates are expected to have an understanding of the objectives, operations, and effectiveness of the following insurance programs:

- Social Security
- Flood insurance
- Crop Insurance
- Unemployment
- Medicare
- Residual markets (e.g., auto, workers compensation, property)
- Workers compensation
- Automobile Plans (e.g., MD Fund)
- Guaranty funds
- Government Backstops, e.g., TRIA and FL Cat Fund

### LEARNING OBJECTIVES

<table>
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<tr>
<th>KNOWLEDGE STATEMENTS</th>
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<tbody>
<tr>
<td>a. Reason for inception</td>
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<td>b. Major historical development</td>
</tr>
<tr>
<td>c. Philosophy of program</td>
</tr>
</tbody>
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### READINGS

- Government Insurers Study Note
- Hamilton and Ferguson, pp. 6.31–6.34 and 9.36–9.40
- King
- Porter 2
- Webel
- Wiening et al.

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### LEARNING OBJECTIVES

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<th>KNOWLEDGE STATEMENTS</th>
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<tr>
<td>a. Funding mechanisms/sources</td>
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<td>b. Allocation/assignment of exposures and associated costs</td>
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<tr>
<td>c. Eligibility provisions</td>
</tr>
<tr>
<td>d. Claim settlement and insurance coverage provisions</td>
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<tr>
<td>e. Welfare (subsidization) versus insurance principles</td>
</tr>
<tr>
<td>f. Private response to gap in government program (e.g., Medigap, supplementary health)</td>
</tr>
</tbody>
</table>

### READINGS

- Bartlett et al.
- Government Insurers Study Note
- Hamilton and Ferguson, pp. 6.31–6.34 and 9.36–9.40
- King
- Porter 2
- Webel
- Wiening et al.
LEARNING OBJECTIVES | KNOWLEDGE STATEMENTS
--- | ---
3. Evaluate the effectiveness of a government/industry program. Range of weight: 3-7 percent | a. Solvency  
b. Efficiencies  
c. Stability  
d. Viability/longer term prospects  
e. How well program meets its purpose  
f. Effect of external factors (e.g., economic conditions, weather, regulation, etc.)

READINGS
Bartlett et al.  
Government Insurers Study Note  
Hamilton and Ferguson, pp. 6.31–6.34, 9.36–9.40  
King  
Porter 2  
Weibel  
Wiening et al.

C. Financial Reporting and Taxation
Range of weight for Section C: 35-55 percent
This section addresses financial reporting, solvency, and taxation issues. Candidates should have detailed knowledge of the contents, purposes, and recent changes in the NAIC Annual Statement and the Insurance Expense Exhibits. Knowledge of federal income tax treatment, including loss reserve discounting, is expected.

Candidates may find it valuable to review an actual insurer’s Annual Statement to gain a more complete understanding of the key schedules, particularly the Notes to Financial Statements and General Interrogatories Sections. A candidate may review the Annual Statement of the company for which the candidate works or the Annual Statement of a publicly held company. There are links to publicly available Annual Statements of a few U.S. insurers in the citation for the NAIC Annual Statement Examples in the Complete Text References section below. Candidates are not responsible for the details of the companies’ Annual Statement.

Candidates should understand the details of, and the reasons for, the differences between Generally Accepted Accounting Principles (GAAP), Statutory Accounting Principles (SAP), and International Financial Reporting Standards (IFRS).

This section is complemented by readings on solvency monitoring systems such as Risk Based Capital (RBC) and the IRIS ratios.

LEARNING OBJECTIVES | KNOWLEDGE STATEMENTS
--- | ---
1. Describe the elements of the Annual Statement. Complete specific schedules and exhibits and use them to evaluate the financial health of an insurance entity. Range of weight: 20-25 percent | a. Balance sheet  
b. Income statement  
c. Change in surplus  
d. Schedule P  
e. Insurance Expense Exhibit  
f. Notes to financial statements  
g. Reinsurance accounting including Schedule F  
h. Underwriting and Investment Exhibit  
i. Exhibit of Premiums and Losses (Statutory Page 14)
### LEARNING OBJECTIVES | KNOWLEDGE STATEMENTS
---|---
2. Using RBC formulas and IRIS ratios, evaluate an insurer’s financial health.  
Range of weight: 10-15 percent | a. RBC formula  
b. Components of RBC  
c. IRIS ratios  
d. Interaction of RBC and IRIS Ratios

### READINGS
- 2013 IEE
- Feldblum (Surplus)
- NAIC Annual Statement
- NAIC Annual Statement Examples
- NAIC SSAP 5R, 9, 53, 55, 62R, and 65
- Odomirok et al.

### LEARNING OBJECTIVES | KNOWLEDGE STATEMENTS
---|---
3. Differentiate between various accounting reporting principles and standards.  
Range of weight: 5-10 percent | a. U.S. Statutory Accounting Principles  
b. Generally Accepted Accounting Principles (SEC Filers)  
c. Adjustments to go from SAP to GAAP  
d. Fair Value of claims liabilities, including Risk Margins  
e. International Financial Reporting Standards  
f. Solvency II

### READINGS
- Odomirok et al.
- NAIC IRIS

### LEARNING OBJECTIVES | KNOWLEDGE STATEMENTS
---|---
4. Calculate specific elements of income tax and evaluate their implications for a property/casualty insurer.  
Range of weight: 0-5 percent | a. Discounting  
b. Elements of income tax calculation  
c. Statutory book income versus taxable income  
d. Alternative minimum tax  
e. Deferred Tax Asset and Deferred Tax Liability  
f. Temporary vs. permanent differences

### READINGS
- Feldblum (Loss Reserve Discounting, Taxable Income, and Taxes and Investment Strategy)
- Odomirok et al.
D. Professional Responsibilities of the Actuary in Financial Reporting

Range of weight for Section D: 10-15 percent

This section focuses on the professional responsibilities of the appointed actuary related to the reporting of financial results by property/casualty insurance companies in the United States of America. The identification of the appointed actuary is described in the Property and Casualty Annual Statement Instructions issued by the NAIC.

The candidate will be required to understand the various statutory requirements of the appointed actuary, and the appropriate professional standards and educational notes issued by the American Academy of Actuaries that are related to the financial reporting of property and casualty insurance companies.

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<th>LEARNING OBJECTIVES</th>
<th>KNOWLEDGE STATEMENTS</th>
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| 1. Explain the responsibilities of an actuary as defined by standards of practice, regulators, and insurance laws for financial reporting. Range of weight: 10-15 percent | a. Statutory Prescribed Statement of Actuarial Opinion  
b. Standards of Practice  
c. Actuarial Report  
d. Actuary and auditor relationship  
e. Materiality  
f. Actuarial Opinion Summary |

READINGS
AAA Materiality  
ASOP 20, 36, 41, and 43  
COPLFR P&C Practice Note  
Odomirok et al.

E. Reinsurance Accounting Principles

Range of weight for Section E: 5-10 percent

This section presents the general concepts of reinsurance accounting to the candidate. The candidate should become familiar with reinsurance accounting terminology and practice.

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<th>LEARNING OBJECTIVES</th>
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| 1. Describe reinsurance accounting terminology and practice, and evaluate considerations such as risk transfer testing and commutations. Range of weight: 5-10 percent | a. Identification and evaluation of insurance and financing components of the contracts  
b. Determination whether the contract qualifies for insurance accounting treatment or deposit accounting treatment (i.e., passes risk transfer), and understand impact on financial statements  
c. Commutations—definition, motivations of parties, and accounting and tax treatment |

READINGS
ASC 944-020-15  
Blanchard and Klann  
Freihaut & Vendetti  
SSAP 62R  
Klann
Complete Text References for Exam 6–United States

Text references are alphabetized by the citation column.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Abbreviation</th>
<th>Learning Objective</th>
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<tbody>
<tr>
<td>2013 Insurance Expense Exhibit.</td>
<td>2013 IEE</td>
<td>C1</td>
<td>B/NEW</td>
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<tr>
<td>Feldblum, S., “Statutory Surplus: Computation, Pricing and Valuation,” CAS Study Note, June 2003. Candidates are not responsible for the end notes.</td>
<td>Feldblum (Surplus)</td>
<td>C1</td>
<td>OP</td>
</tr>
<tr>
<td>Financial Accounting Standards Board, Accounting Standards Codification 944, “Financial Guarantee Insurance Contracts,” 2011, Section 15, Scope and Scope Exceptions, paragraphs 15-1 to 15-2; 15-5 to 15-8; 15-34 to 15-35; 15-41 to 15-44; and 15-49 to 15 54. Candidates are not responsible for material relating to long-duration contracts and/or life insurance.</td>
<td>ASC 944-020-15</td>
<td>E1</td>
<td>SK</td>
</tr>
<tr>
<td>Freihaut, D.; and Vendetti, P., “Common Pitfalls and Practical Considerations in Risk Transfer Analysis,” Casualty Actuarial Society E-Forum, Spring 2009. (Appendices A and B are for information only and will not be directly tested.)</td>
<td>Freihaut &amp; Vendetti</td>
<td>E1</td>
<td>OP</td>
</tr>
<tr>
<td>“Government Insurers Study Note,” CAS Study Note, Updated September 2013. Candidates are not responsible for numbers or statistics in charts.</td>
<td>Government Insurers Study Note</td>
<td>B1, B2, B3</td>
<td>OP New</td>
</tr>
<tr>
<td>Klann, J., “Reinsurance Commutation,” 2013.</td>
<td>Klann</td>
<td>E1</td>
<td>OP NEW</td>
</tr>
<tr>
<td>Citation</td>
<td>Abbreviation</td>
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<tr>
<td>National Association of Insurance Commissioners, <em>Official 2013 NAIC Annual Statement Blanks, Property and Casualty</em>, (both individual and consolidated basis), pp. 2-13, Notes to the Financial Statement p. 14 (refer to the Odomirok paper for the Notes to cover); Schedules D (pp. SI03 through SI09), F (pp. 20-30), H (pp. 31-33), P (pp. 34-94). Candidates will be expected to have knowledge of other sections of the annual statement that are discussed in other Syllabus readings. Candidates are not responsible for page numbers. [The “Notes to the Financial Statement” are cited for reference only. Candidates are responsible for the Notes as described in the Odomirok reading where the Notes are referenced by title. If the 2013 Annual Statement and the study materials differ, candidates may base their answers on either.]</td>
<td>NAIC Annual Statement</td>
<td>B NEW</td>
<td>C1</td>
</tr>
<tr>
<td>National Association of Insurance Commissioners Official Annual Statement Examples: The following companies post their annual statements online. Candidates may use these (or their own companies’ statements) as illustrations to better understand the annual statement but are not responsible for any company-specific data: (1) Travelers and (2) the Liberty Mutual Group.</td>
<td>NAIC Annual Statement Examples</td>
<td>OP</td>
<td>C1</td>
</tr>
<tr>
<td>Odomirok, K.C.; McFarlane, L.M.; Kennedy, G.L; and Brenden, J., <em>Financial Reporting Through the Lens of a Property/Casualty Actuary</em>, Casualty Actuarial Society, 2013, Edition 4, excluding the Canadian Intro, Canadian Chapters 27-29 (pp252-279), and Appendix II.</td>
<td>Odomirok et al.</td>
<td>OP NEW</td>
<td>A2, C1, C2, C3, C4, D1</td>
</tr>
<tr>
<td>Porter, K., <em>Insurance Regulation</em>, Insurance Institute of America, 2008, Chapters 2 (excluding 2.19–2,29), 3 (excluding 3.21–3.25), 4, 5, 6 (pp. 6.11–6.17), 8 (pp. 8.3–8.6), and 12 (excluding pp. 12.12–12.17).</td>
<td>Porter 1</td>
<td>B</td>
<td>A1, A2, A3, A4</td>
</tr>
<tr>
<td>RAND Institute for Civil Justice, Research Brief RB-9037-ICJ, 2002.</td>
<td>RAND</td>
<td>OP</td>
<td>A5</td>
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<tr>
<td>Citation</td>
<td>Abbreviation</td>
<td>Learning Objective</td>
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**Source Key**

**B** Book—may be purchased from the publisher or bookstore or borrowed from the CAS Library.

**NEW** Indicates new or updated material.

**OP** All text references marked as Online Publications will be available on a web page titled Complete Text References.

**SK** Material included in the Fall 2014-Spring 2015 Study Kit.

**SKU** Material included in both the Fall 2014-Spring 2015 CAS Study Kit and the 2014 Update to the 2013 Study Kit.

Items printed in red indicate an update or change.

**Publishers and Distributors**

Contact information is furnished for those who wish to purchase the text references cited above. Publishers and distributors are independent and listed for the convenience of candidates; inclusion does not constitute endorsement by the CAS.

ACTEX Publications (Mad River Books), 107 Groppo Drive, Suite A, P.O. Box 974, Winsted, CT 06098; telephone: (800) 282-2839 or (860) 379-5470; fax: (860) 738-3152; e-mail: retail@actexmadriver.com; Web site: www.actexmadriver.com.

Actuarial Bookstore, P.O. Box 69, Greenland, NH 03840; telephone: (800) 582-9672 (U.S. only) or (603) 430-1252; fax: (603) 430-1258; Web site: www.actuarialbookstore.com.

*Actuarial Digest*, P.O. Box 1127, Ponte Vedra, FL 32004.
American Institute for Chartered Property Casualty Underwriters, Order Department, P.O. Box 3016, 720 Providence Road, Malvern, PA 19355-0716; telephone: (610) 644-2100; fax: (610) 640-9576.

*Association Form of the Annual Statement Blanks*, Bowne Insurance Services, 1717 Arch Street, 31st Floor, Philadelphia, PA 19103; telephone: (215) 988-5690 or (800) 234-6859.

Casualty Actuarial Society *E-Forum, Forum, Foundations of Casualty Actuarial Science* (Fourth Edition), PCAS, and Discussion Paper Program, 1100 N. Glebe Road, Suite 600, Arlington, VA 22201-4798; telephone: (703) 276-3100; fax: (703) 276-3108; e-mail: office@casact.org; Web site: www.casact.org.

Insurance Expense Exhibit, Bowne Insurance Services, 1717 Arch Street, 31st Floor, Philadelphia, PA 19103; telephone: (215) 988-5690 or (800) 223-3103.

Insurance Institute of America, 720 Providence Road, Malvern, PA 19355-0770; telephone: (610) 644-2100.

*Journal of Insurance Regulation*, National Association of Insurance Commissioners, 120 W. 12th Street, #1100, Kansas City, MO 64105; telephone: (816) 842-3600.

*Journal of Risk and Insurance, The*, American Risk and Insurance Association, 716 Providence Road, P.O. Box 3028, Malvern, PA 19355; telephone: (610) 640-1997; fax: (610) 725-1007; Web site: www.aria.org.

*NAIC Annual Statement Blanks, Property and Casualty* may be obtained from Bowne Insurance Services, 1717 Arch Street, 31st Floor, Philadelphia, PA 19103; telephone: (215) 988-5690 or (800) 223-3103.

National Association of Insurance Commissioners, 120 W. 12th Street, #1100, Kansas City, MO 64105; telephone: (816) 842-3600.

RAND Institute for Civil Justice, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138, Web Site: www.rand.org.

RR Donnelley, Two Logan Square, 18th Floor, Philadelphia, PA 19103; telephone: (215) 988-5622 or (800) 234-6859 [for the *NAIC Annual Statement Blanks, Property and Casualty* and the Insurance Expense Exhibit (P&C)].

Stanford University Press, 1450 Page Mill Road, Palo Alto, CA, 94304; telephone (800) 621-2736; Web site: www.sup.org.