**Background**

During the 1980s, many U.S. banks recorded assets at book value, allowing them to increase reported equity by selling assets with market values above book value. This left many banks holding portfolios of assets with market values below book value. This practice of recording assets at book value masked the true financial position of many of the banks, allowing the extent of their insolvency to grow before it was realized by the market.

The United States Financial Accounting Standards Board (FASB) subsequently introduced reporting of assets at market value. Many groups were concerned with the resulting inconsistency between asset and liability valuations, with no fair value liability valuation methods being available at the time. The FASB did not accept the argument that implementation of valuing assets at fair value should thus be aborted, and has continued toward implementing valuation of liabilities on a ‘fair value’ basis. Around the same time, the International Accounting Standards Committee (which is now called the International Accounting Standards Board, or IASB) was developing an accounting standard for insurance using similar market value principles. The standards issued by the IASB are known as International Financial Reporting Standards (IFRS).

The CAS engaged PwC to consider the issues property/casualty insurance companies may face when producing financial statements based on fair value accounting standards. Fair value has been defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction. Stated another way, fair value is equivalent to a market value (e.g., stocks and bonds valued at their current market value), or at an estimated market value if a sufficiently active market does not exist.

A sufficiently active market currently does not exist for property/casualty insurance loss and loss adjustment expense (LAE) reserves, as they are not traded in an open market like selected assets (e.g. stocks, bonds). Therefore, the market value of loss and LAE reserves should be evaluated based on the application of fair value principles using actuarial methods and models.

The majority of actuarial papers and articles published to date on the topic of fair value accounting for property/casualty insurance companies have focused on the theoretical aspects and conceptual framework of such modeling. The objective of the CAS project was to launch practical research for an application of some of these theories and concepts to real sets of claims data, and evaluate the impact they could have on the financial statements of ‘typical’ US property/casualty insurers that were intended to represent a cross-section of the industry.

This paper presents our findings of this research project, subject to the project parameters described in the Scope & Objectives section. Due to the nature of the source for the data used in this study (that is, statutory-basis Schedule P data), all references to loss reserves in this paper should be considered to mean loss and defense and cost containment expense reserves.

This paper should not be regarded as representing the views of the Casualty Actuarial Society or of the authors’ employer. This paper should be read in its entirety as reading individual sections out of context may be misleading. We hope that this paper will be used
as a basis to promote further work and discussion in this important area. Our analysis and findings in this paper should not be relied upon in application to the financial statements of any company. As such, we assume no liability in respect of the implementation of the methods or models described herein, nor the consequences of applying such methods and models.

A list of technical definitions and abbreviations used in this paper is given as part of the Appendix.