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Submitted for the Record

National Association of Insurance Commissioners  
Public Hearing on the Pricing of Auto Insurance

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Commissioner Judson, on behalf of the American Academy of Actuaries<sup>1</sup> Auto Insurance Committee, I appreciate this opportunity to testify before the Auto Insurance (C/D) Study Group of the National Association of Insurance Commissioners (NAIC).

Actuaries, as this audience knows, are heavily involved in the development of rates for auto insurance. Actuaries are employed by major insurers that write auto insurance, by regulatory bodies charged with the regulation of auto insurance, and by rating and statistical organizations that compile experience data and develop rates or provide input into the development of rates.

Actuaries have an established body of professional practice standards, known as Actuarial Standards of Practice (ASOPs). Those standards are part of a professionalism

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<sup>1</sup> The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

framework that includes a Code of Professional Conduct,<sup>2</sup> qualification standards, and an established disciplinary process. The Standards are promulgated by the Actuarial Standards Board (ASB), an independent standard-setting body established within the Academy, the members of which are senior actuaries who are required to be broadly representative of all areas of actuarial practice. The ASB has a number of operating committees that support the plenary Board by preparing and drafting Standards of Practice for the ASB's consideration and approval.

Most of my comments today will focus on the ASOPs that are relevant to auto insurance ratemaking. The ASOPs are complete documents which, as my lawyer friends say, speak for themselves, so my comments are only intended to touch on some relevant highlights.

The focus of the questions in the notice for this public hearing is on rating variables. Rating variables are the way the profession establishes risk classifications. ASOP No. 12 is entitled Risk Classification (for All Practice Areas). The current version of the standard will be 10 years old next month. It was updated for consistency of language in 2011. It applies to all areas of actuarial practice, including life, health and pension, and of course, property/casualty. It covers the performance of professional actuarial services with respect to designing, reviewing, and changing of risk classification systems (Section 1.1).

Most of ASOP No. 12 deals with risk characteristics, which are the measurable or observable factors or characteristics that are used to assign each risk to one of the risk classes of a risk classification system. Examples in auto insurance would include mileage, either annual or commuting, make and model of car, and territory.

One key portion of ASOP No. 12 deals with expected outcomes: "the actuary should select risk characteristics that are related to expected outcomes."<sup>3</sup> (Section 3.2.1) The standard also says that "the actuary should consider the interdependence of risk characteristics."<sup>4</sup> (Id.) In auto insurance, for example, both territory and age are often used as risk characteristics; those risk characteristics might be interdependent in a territory that contained several senior citizen retirement communities. Youthful drivers and "muscle" cars would be another example. Actuaries have a variety of ways to recognize and correct for such interdependence.

Other sections of ASOP No. 12 say that actuaries "should select risk characteristics that are capable of being objectively determined" (Section 3.2.3) and the actuary's selection of a risk characteristic "should reflect the tradeoffs between practical and other relevant considerations" (Section 3.2.4). This has influenced the adoption of telematics in auto insurance, in which mileage, location, and operating characteristics can now be practically and objectively recorded because of advances in technology.

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<sup>2</sup> Code of Professional Conduct: [http://dev.actuary.org/files/code\\_of\\_conduct.8\\_1.pdf](http://dev.actuary.org/files/code_of_conduct.8_1.pdf)

<sup>3</sup> ASOP No. 12: <http://www.actuarialstandardsboard.org/asops/risk-classification-practice-areas/>

<sup>4</sup> ASOP No. 12.

Another section deals with applicable law and states that the actuary “should consider whether compliance with applicable law creates significant limitations on the choice of risk characteristics” (Section 3.2.5). Sometimes, applicable law creates significant limitations on the choice or operation of risk classifications. Examples of such legal limitations in auto insurance could include prohibitions on the use of gender or limitations on territorial rate relativities. The actuary needs to consider the materiality of such limitations, including adverse selection (Section 3.3.2).

Other considerations referenced in ASOP No. 12 include credibility and practicality (Sections 3.3.2 (b) and (c)). The actuary should test the long-term viability of the risk classification system. ASOP No. 12 recognizes that considerable professional judgment is required in risk classification work.

Other ASOPs relevant to auto insurance ratemaking include:

- Credibility Procedures (ASOP No. 25)
- Data Quality (ASOP No. 23)
- Expense Provisions in Property/Casualty Insurance Ratemaking (ASOP No. 29)
- Trending Procedures in Property/Casualty Insurance (ASOP No. 13)
- Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking (ASOP No. 30)

As I said, the ASOPs speak for themselves, and, in the interest of time, I will not discuss each of them in detail.

The ASB is in the process of developing a new standard on property/casualty ratemaking. A draft has been exposed for comment, and a revised draft is being reviewed by the ASB for another comment period. The comments received have served to highlight both the relationship and the distinction between ratemaking and pricing. Recent developments in technology have given rise to more sophisticated approaches to pricing, including price optimization. That has generated considerable discussion, including the development of guidance by your own Casualty Actuarial and Statistical Task Force.

In conjunction with the development of the ASOP on property/casualty ratemaking, the Casualty Actuarial Society (CAS) is reviewing its longstanding (1988) Statement of Principles Regarding Property and Casualty Insurance Ratemaking.<sup>5</sup> An exposure draft of a revised Statement of Principles was circulated and received many comments. The revision is now on hold until the ASOP on ratemaking has been completed.

The guidance for actuaries in both the CAS Statement of Principles and in the draft ASOP on ratemaking generally focuses on estimating all future costs associated with the transfer of risk.

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<sup>5</sup> Statement of Principles Regarding Property and Casualty Ratemaking:  
<http://www.casact.org/professionalism/standards/princip/sppcrate.pdf>

Finally, the Notice for this hearing referred to auto insurance, but did not suggest a limitation to private passenger auto insurance. Commercial auto insurance is an important area of actuarial practice. Actuaries are active in the development of rating variables and risk characteristics and in experience and retrospective rating plans. They are also active in specialty insurers and programs for this coverage. The Standards discussed above apply in this area as well.

Thank you for your attention. I will be pleased to respond to any questions or comments that you have.