Comments on HB656 and HB657 Prohibiting
Insurer Use of Occupation, Education, Marital Status and Gender Data

Before the House Economic Matters Committee
Maryland General Assembly—February 8, 2018

My name is Kevin M. Ryan. I am the senior property/casualty fellow at the American Academy of Actuaries (Academy). My remarks are focused on the actuarial implications of the use of occupation, education, marital status, and gender as factors in determining automobile insurance rates.

First of all, what are the applicable regulatory standards that apply to this issue? And what are the actuarial principles and standards of practice that apply?

Let me start with the language found in Section 11-205 d of the Maryland Insurance statutes. That provision prohibits the use of insurance rates that are excessive, inadequate, or unfairly discriminatory. Insurance rating plans, by their design, group risks with similar characteristics and charge different rates for other risks and as noted in Section 11-205 f of the Maryland Insurance statutes. What is prohibited is “unfair” discrimination.

The acceptability of specific characteristics, such as gender, marital status, occupation, and education in rating and underwriting by regulators has been based on insurers demonstrating that there is a relationship between a specific characteristic and potential losses or expenses, in which case the “discrimination” is accepted as “fair” provided that all risks that share a specific characteristic are rated the same.

1 The American Academy of Actuaries is a 19,000-member professional association whose mission is to serve the public on behalf of the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.
Across the states, most rating statutes have an absolute prohibition against the use of such factors as race, religion, or national origin. Beyond these, the determination of the words “unfairly discriminatory” is generally based on whether the premiums charged for the proposed grouping are commensurate with the expected losses or expenses.

The words “not excessive, inadequate, or unfairly discriminatory” have a defined meaning for actuaries. Principle 4 of the Casualty Actuarial Society’s *Statement of Principles Regarding Property and Casualty Insurance Ratemaking* states that:

A rate is reasonable and not excessive, inadequate or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.²

Thus, from an actuarial perspective, a rate that reflects cost or expense differences on the basis of relevant risk characteristics is not unfairly discriminatory. Of course, rates are subject to the determination of public officials who make the laws of the state in which the rate is set.

All costs associated with an individual risk transfer are reflected in the rating structure through the risk classification system. This system assigns risks to groups based upon the expected cost of the insurance coverage provided. The actuary’s role in the design or review of a risk classification system is guided by Actuarial Standard of Practice (ASOP) No. 12, *Risk Classification*.³

According to the definitions section of ASOP No. 12, “risk characteristics” are “measurable or observable factors or characteristics that are used to assign each risk to one of the risk classes of a risk classification system.” (Emphasis added.) For example, in automobile insurance, risk characteristics include such things as the driver’s prior accident and traffic violation history. Auto insurance rating plans also generally include more general factors such as the age, gender, and marital status of the drivers. For homeowners’ insurance, the location and type of construction of the dwelling are examples of two common risk characteristics upon which distinctions in rate have historically been made. In any particular risk classification system, there may be numerous risk factors containing several levels of classification assignment.

ASOP No. 12 further provides guidance to the actuary to select risk characteristics that are related to expected outcomes and states the following:

A relationship between a risk characteristic and an expected outcome, such as cost, is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience correlates to the risk characteristic. In demonstrating a relationship, the actuary may use relevant information from any reliable source, including statistical or other mathematical analysis of the available data. The actuary may also use clinical experience and expert opinion. (Section 3.2.1) (Emphasis added)

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³ Actuarial Standard of Practice No. 12, *Risk Classification (For All Practice Areas)*. Adopted by the Actuarial Standards Board, May 2011.
One criticism that is sometimes leveled at certain rating factors is that they are not “causal” in nature; that is, there is not a proven cause-and-effect relationship between the rating factor and the risk being insured against. Causality, however, is not required for risk classification factors.

ASOP No. 12 states:

Causality—While the actuary should select risk characteristics that are related to expected outcomes, it is not necessary for the actuary to establish a cause and effect relationship between the risk characteristic and expected outcome in order to use a specific risk characteristic. (Section 3.2.2)

How can these rating laws and actuarial principles and standards be applied to gender, marital status, education and occupation?

Gender, marital status, occupation, and education level are used in rating and underwriting by many insurance companies throughout the country for many lines of insurance. For example, in professional liability insurance, the rates are different for surgeons than for general practitioners, nurses, and anesthesiologists. Similarly, doctors’ professional liability rates differ from those of lawyers and accountants. Workers’ compensation rates differ based on the type of work performed at various businesses.

For private passenger auto insurance, many companies also offer discounts or special rates for certain occupation groups, affinity groups, and education levels. While there is not a clear causal relationship in the case of personal auto insurance, there is actuarial support demonstrating that these rating criteria can be used to measure differences in expected losses and have been allowed to be used to differentiate, fairly, between risks. For example, in 2006, the Maryland Insurance Administration undertook a review of Geico’s use of occupation and education in auto insurance rating and concluded that Geico had demonstrated that education and occupation are predictors of auto insurance loss, and that Geico’s use of them along with other risk characteristics in auto insurance appeared consistent with relevant regulatory requirements related to risk characteristics.4

Conclusion

In most states, rating statutes require that rates not be excessive, inadequate, or unfairly discriminatory. Insurance laws, actuarial principles, and actuarial standards of practice generally require that insurers using gender, marital status, occupation, education, or any other rating factor be able to demonstrate that such factors are predictive in terms of being related to expected outcomes and demonstrating differences in losses or expenses for such classifications. Rates within a risk classification are generally deemed not to be unfairly discriminatory if differences in rates reflect material differences in expected costs for risk characteristics.