NATIONAL COUNCIL OF INSURANCE LEGISLATORS
SPECIAL COMMITTEE ON RACE IN INSURANCE UNDERWRITING
TAMPA, FLORIDA
DECEMBER 9, 2020
DRAFT MINUTES

The National Council of Insurance Legislators (NCOIL) Special Committee on Race in Insurance Underwriting met at the Tampa Marriott Water Street Hotel on Wednesday, December 9, 2020 at 9:30 A.M. (EST). This set of minutes documents the second of two meetings held that day which convened at 2:00 P.M. (EST). The first meeting is documented in a separate set of minutes.

Senator Neil Breslin of New York, Chair of the Committee, presided*.

Other members of the Committee present were (* indicates virtual attendance via Zoom):

Sen. Jason Rapert (AR)
Asm. Ken Cooley (CA)*
Rep. Matt Lehman (IN)
Rep. Edmond Jordan (LA)*
Rep. George Keiser (ND)*
Asw. Maggie Carlton (NV)*
Asm. Kevin Cahill (NY)*
Asw. Pam Hunter (NY)*
Sen. Bob Hackett (OH)*

Other legislators present were:

Sen. Mike Gaskill (IN)
Rep. Peggy Mayfield (IN)*
Rep. Jim Gooch (KY)*
Sen. Shawn Vedaa (ND)
Rep. Wendi Thomas (PA)*
Rep. Joe Schmick (WA)*

Also in attendance were:

Commissioner Tom Considine, NCOIL CEO
Will Melofchik, NCOIL General Counsel
Tess Badenhausen, Assistant Director of Administration, NCOIL Support Services, LLC

RATING FACTOR DISCUSSION

Eric Poe, COO of Cure Auto Insurance (Cure), thanked the Committee for the opportunity to speak and first provided some background on himself because it is relevant for his testimony today. Cure is a regional non profit reciprocal exchange that writes private passenger automobile insurance in NJ and PA. Cure insures about 35,000 vehicles and was founded 30 years ago by his mother who was a Clifford D Spangler awarded actuary and his stepfather who was an insurance commissioner in NJ for two terms for 8 years. The unique background about Cure is that it swims in a very large pool of mammoth multibillion dollar publicly traded companies that are here to make profits while Cure is just managing a non profit reciprocal. Cure does not employ the use of education, occupation or credit scores and is the only carrier in NJ that does not employ the use of credit scores since they were regulatorily allowed in 2003. Mr. Poe stated that he put together his presentation about 16 years ago when the re-entrance of Geico for the first time in 28 years it became known to him that they used education and occupation as primary or sole factors in determining eligibility for insurance carriers and he spent 16 years crusading around the country testifying in FL, NH, and NJ and PA in order to try and ban this practice and raise more awareness about it.

Mr. Poe stated that he believes these practices are about income discrimination that does have a disparate impact on race and he would like to get to that in this presentation. The first slide talks about what I think everybody understands. There are a lot of factors that we use to determine rates in underwriting. I like to say its just underwriting. As a legislature I think we have made a determination that there is a line we are going to draw on what we are going to allow for those factors and that line was drawn in 1964 with the passage of the Civil Rights Act. Most people might not know this but in the year 2000, the NAIC put together a Working Group of a number of insurance commissioners to study how many life insurance companies were still using race as the basis for their rates. Surprising to most is that they actually found there were a number of life insurance companies that used a proxy for race after the passage of the Civil Rights Act in 1964. So, the insurance industry does have a checkered past regarding this and what they found was previous to the actual passage of the Civil Rights Act, life insurance companies had preferred companies in which they gave only white applicants eligibility into and based on you race if you were black you were ineligible for the companies and given much higher rates and worse benefits.

After the passage of the Civil Rights Act what they found was there was only one change made in the underwriting process and that one change was that they eliminated the question of what is your race and substituted the proxy of what is your highest level of education attained and what is your current occupation. In one real life case study, there was a federal class action case against Monumental Life Insurance Company that is public information about their use of proxies. In that scenario the previous company that they used for blacks they substituted the occupations of busboys, dishwashers, garbage collectors, handymen, janitors and unskilled laborers for what they previously used for the company reserved only for blacks. As you can see for the whites there were occupations like office workers and salesman that required four year college degrees.

Mr. Poe stated that for the first half of this session there has been a debate about what to do in these situations. The bottom line that we need to concede as an industry and the consumer advocates need to concede as well is that higher income drivers produce higher profits to our industry. That is just a given and instead of debating whether or not these are actuarially sound practices I would like to concede it. If we concede that now you see the motive behind anything that is a proxy for income and when you have a proxy for income it is going to have a disparate impact on certain classes. So, instead of us going out as an industry and asking the blunt question of how much money do you make and legislators obviously being shocked at that use of factor as the basis of rates we simply adopt proxies for that. At a certain point when does willful blindness equate to intent and the reality is that there are probably not two betters factors in this country for a proxy for income than a person's education or their occupation.

In a real life example in NJ, it was found that the use of education and occupation alone were used as factors when Geico re-entered NJ. Most people don't know this because most of the companies Cure competes with adopt the same trademark name for various different companies for example most people don't know there is Geico Insurance, Geico Indemnity and Geico Casualty. Each of them has separate base rates and in their world get to actually adopt a separate P&L statement and different rates that they get to file with the DOI based on those entities as separate companies. What is unbeknownst to most people is that when you apply for insurance on their website they will not and have no regulatory requirement to tell a consumer that they are rejected from the preferred Geico company based on their education and occupation alone. A lot of times people ask why hasn't this been more publicly known and why hasn't there been more uproar from the consumer advocates and its because there is no

requirement to notify somebody. Unlike the Fair Credit Reporting Act (FCRA) where there is a requirement to explain to somebody that there has been an adverse decision based on their credit score there is no such legislation on the books in the U.S. that requires insurance carriers to disclose when they are going to reject you on that basis.

So, what happens when a consumer goes there and they don't have a high level of education or a high paying job? They might be rejected and when they are rejected they may have a higher rate than somebody else and they leave the website and go to another company or go uninsured. Mr. Poe then reviewed what was found in NJ with regard to the adoption of Geico's criteria for where they use the criteria for the highest base rate standard company – those people are minimally skilled clerks, assistants, postal clerks and stock clerks. That is directly from the actual filing that was found in NJ in 2004 when they reentered the state which is what spurred a lot of legislation that still hasn't been passed. But, to fast forward, what is the motive? As any industry, the motive is to make profits but it goes beyond more than just profits because what happens that most people don't know is that the terms and conditions of most of Cure's industry competitors require that anybody who simply applies for insurance on their website allows that persons information to be shared with every marketing partner of that company regardless of whether or not they buy a policy.

So, earlier there was a discussion with Mr. Birnbaum about what makes this any different from Amazon or any other industry that is trying to make profit and data mine. First, car insurance is mandated in 48 out of 50 states. You are not mandated to buy widgets on Amazon. Second, they capture your information on Amazon or Best Buy when you choose to buy a product for them. What people don't realize is that by simply trying to save money by going to Geico.com you are giving them the information even if you don't buy a policy to take your credit score, credit report, occupation, lease – everything in your credit report and share it with their marketing partner. You can imagine what that would be worth in terms of finding new leads if you're one of these insurance companies that has a data set that they can exchange to reduce their cost to market to future higher income drivers. So that data set is worth a lot of money and it is different from people who voluntarily buy a product.

So, how do we get this past the legislature? Mr. Poe stated that he has been testifying for 16 years on this and the reason why is that his industry has done a really good job in confusing and re-defining what the term risk really means in all of these regulations. I've heard people sit here and talk earlier about the fact that there are regulations or laws in every state that say you cant use a factor that's not unfairly discriminatory or inadequate or any of these criteria that we have in our state laws. That's true unless its actuarially sound. Well, what does that term actuarially sound mean. If you google that term it has many different definitions but what it essentially means is that you are charging premiums to cover your claims costs and expenses. So, how has the industry been able to pass this with all the regulators in the states over the years? Because now in those laws that say you must show that these factors are correlated to risk, all they do is show a correlation to loss ratios. Loss ratios by definition in the industry is simply a measurement of profitability. If you have a combined loss ratio of 90% you are making a 10% profit. So, if I take a factor that correlates to loss ratios and that's the only thing I need to show to a legislator or regulator to use it, we cant deny this – the reality is that higher income drivers produce better profitability for the industry so any proxy for income will produce the same results. That is why we are here today because as a legislature as that body of law we are here to determine what is the public policy on this and is this country ok with the fact that we are simply going to discriminate against those that are the poorest yet at the same time mandate insurance in 48 out of 50 states.

The commonsense assumption made in this country all the time is a simple application that if you have more accidents you should be paying higher rates. The largest study on this recently was from Consumer Reports that shows people with DWI's and accidents actually pay less for car insurance in this country than those people who have sub 650 credit scores and that flies in light of all of what we are saying in terms of common sense and that is because higher income drivers result in significantly higher profits for the industry. To prove this, the largest study ever done was by Quality Planning Corporation which I think was in 2004. They studied 1 million car insurance policies and tried to figure out what were the most highest propensity of accidents based on occupations. Surprising to most, after students, doctors, attorneys and architects had the highest likelihood of getting in a car accident than any other occupation which flies in light of other studies done by Consumer Reports, investigative TV and a number of other reports.

So, what is the real life impact? The real life impact is that people in this country who do not have four year college degrees that might have a blue collar occupation like a janitor are going to pay on average depending on what study you look at almost twice as much, in some cases 40% but in other cases 100% in this country depending on what state you live in. For the exact same driver with the exact same driving record with the exact same car, that person who is uneducated and has a lower paying blue collar job could be paying more than twice as much compared to what the other white collar wealthier driver would pay.

The best way to look at this in a microcosm as this is a national coalition of legislators is to see what happened in NJ in a vacuum. In NJ in 2004 there was not a single insurance company allowed to write car insurance based on credit scores, education or occupation – not one carrier in the entire market. From the data that we have right now, from 2007 – 2015 in NJ we have increased our uninsured motorist population by 86% in 8 years. Those uninsured drivers are not people who choose to noy pay their bills – this is an unaffordable product in the marketplace. While people in the industry debate this and there is a bill pending in the NJ Senate to ban the use of credit scores and occupation and education in auto insurance underwriting this is irrefutable evidence of the impact that this has on your own state. Insurance is a necessity in 48 out of 50 states and in those states you will see fines if you don't buy car insurance on the car that you own. More importantly, what most people may or may not know, most states have a bar from you bringing a lawsuit for pain and suffering if you are an innocent victim of a car accident if you have a registered vehicle that does not maintain liability insurance within that state. So, in states like NJ or MI if you are driving without insurance or you have a car that is registered and you don't have liability insurance on it and you are rear ended by the wealthiest person in the world and that person has $1 billion in assets you are not allowed to initiate a lawsuit for pain and suffering as a result of not being able to afford car insurance.

The industry loves testifying against me saying we cant get rid of these factors as they are predictive of loss. They are predictive of probability but what are we talking about here? We are talking about public policy. If you eliminate the practice of the use of these income proxies – obvious income proxies – you are not going to see more people run into trees and rear end people. We are talking about a rating factor here and an underwriting practice. We are not talking about eliminating airbags or blinkers or seatbelts. You are not going to see bigger losses as an aggregate in any state you are in you are just going to simply change the way people are charged for car insurance. Really this is a public policy issue and I think its about time with our social justice movement in this country that we need to pay attention to it. There are two bills one in NJ and one in the federal side sponsored by Senator Cory Booker, and Congresswomen Rashida Tlaib, Bonnie Watson Coleman have introduced and we are hoping that this will finally be the time that public policymakers will finally do what's right.

Roosevelt Mosley, FCAS, MAAA, CSPA, Principal and Consulting Actuary – Pinnacle Actuarial Resources, Inc., thanked the Committee for the opportunity to speak. As a way of background he is a principal and consulting actuary with Pinnacle Actuarial Resources. I have about 27 years of experience in the P&C actuarial space. The first 6 years of that working for insurance companies and the last 21 years spent in consulting. My consulting career has been primarily based in personal lines insurance and has included traditional actuarial work like rating plan development, product management and product development as well as advanced analytics. Our clients include insurance companies, regulators, insurance trade associations and even third party data providers to the insurance industry. The comments I provide today however represent my personal comments not necessarily those of any insurance company or industry group. I appreciate the opportunity to provide an actuarial perspective to this conversation. There has been a lot of discussion today regarding some of the actuarial principles and standards and some of the ways factors are used and justified in the insurance industry so hopefully I can provide some perspective on the actuarial angle on some of these issues.

I am a fellow of the Casualty Actuarial Society (CAS) and a member of the American Academy of Actuaries (AAA) and a certified specialist in predictive analytics so as part of my role I work not only with insurance companies but also with insurance regulators. An example of this is coordinating as part of my work with AAA two day long sessions with the NAIC relating to their summer meeting on predictive analytics and the use of big data. As an actuary I have significant experience in the development and analysis of insurance company rating plans and as requested the focus of my comments today are focused on the use of rating factors in the insurance industry and specifically for personal lines P&C insurance. I will also pick up a little bit on some convos that happened today on the use of telematics and usage based insurance (UBI) for private passenger auto insurance to maybe provide an additional perspective on that. Finally, I'll end with some social considerations that are being discussed by this Committee.

First, to frame and provide some context around this issue I want to provide some background relating to some of the actuarial considerations relating to the use of rating factors. More of this will be provided with some of the AAA representatives so I wont get into all of the details and the points they will make but I believe my remarks will provide some context. Simply put, the use of rating factors in the insurance industry really is to help better determine and allocate the relative cost of insurance for particular policies with different characteristics ensuring that those premiums are adequately matched with the expected losses. In total, insurance company premiums are set to cover expected losses and this gets into the insurance company solvency that was referenced earlier today but in addition to that the premiums also vary based on the characteristics of the policy to reflect differences in expected potential loss and thus the use of rating factors in the insurance industry is to really help satisfy that particular objective.

In terms of the reasons why companies use them I wont get into great detail as some was already covered this morning but I would point the Committee to a document that was produced by the AAA back in 1988 called the Risk Classifications Statement of Principles and this document was actually produced prior to the establishment of the actuarial standards and the promulgation of actuarial standards of practice. However I think the document does detail a couple of considerations relating to the use of rating factors and risk classifications which I think are important to at least create the backdrop of this discussion. The first reason is really for the overall financial soundness of the company and to a certain extent the insurance industry as a whole. To the extent that premiums are able to be matched with loss and are done so in a way that policyholders are charged premiums that commemorate with their expected loss there is essentially an intrinsic equity that's present in the insurance process and that process will help

to avoid issues like anti selectin and protect the financial soundness of both the insurance companies and the insurance industry.

The second reason highlighted by the document is enhanced fairness. When rating factors are associated with the expected loss of insureds, no insured feels like they are either getting a really good or bad deal in terms of the costs they are paying for insurance. When the cost for insurance at least for the perception of the insured is higher than the expected value of that insurance then there are economic considerations that come into play that could begin to impact the financial security of the industry. Third is essentially the economic incentive. For most insurance companies and a lot of companies I worked with there are a couple of objectives that many insurance companies have. One is growth and the second is to be able to do so profitably. To the extent that a better classification plan that is on par with some of the competitors they are facing allows them to do this in a way that doesn't require them to necessarily undercut price and then to be able to grow in a financially responsible way.

To sum up at least the background of why companies use these factors it practically comes down to a reality in todays insurance environment. The complexity of rating especially on the personal lines side has been discussed a bit today but there is one primary theme that underlies that insurance companies are trying to accomplish as it relates to the use of rating factors. Either the company is trying to maintain a proper competitive footing and a proper competitive placement in the industry or attempting to be better at identifying risk and charging for that risk and ultimately driving both growth and profit.

Historically speaking this process was relatively straightforward and transparent. When I began my career in 1993 the key factors used by insurance companies was a relative short list certainly relative to today and they were for the most part fairly standard. In the 1990s some companies began to add additional elements to what they were doing but in essence if I had the characteristics of a policy for an insured that was insured by the company I was working for it was fairly easy to go get a rate filing or get a rate manual from another company and determine what that risk would be charged for that other company. Obviously a lot of that has changed since then and as companies have begun to add more factors there are a couple of things that have happened. One is that it has become more challenging to understand and how to calculate the rate for risk for a competitor. Also, in order for companies to try and maintain some of the competitive advantage that they are trying to go after, some companies have tried to make it harder for companies to figure out exactly what they are doing – not necessarily hiding it from regulators but more so hiding it from companies and maybe filing some pieces under confidential.

So what began to happen as the world became more complex is that insurance companies that weren't maybe as quickly to recognize some of the additional risk classification that was being incorporated, they began to see the results of that both the ability to write the business and the ability to make a profit and it was essentially a lot of these cosmic forces that drove a lot of these companies to follow suit. I provide that background to help set the stage. Having been a part of this process for the past 27 years you can see the progression of a lot of the complexity that's happened in the industry and a lot of that complication has not necessarily come about because insurers are trying to intentionally be discriminatory but really to either establish, reestablish or improve their competitive standing and thus achieve some of the goals that were just mentioned by the previous speakers.

With that as a backdrop lets move to the idea of how companies support or justify the use of a particular rating factor in most states. There are some exceptions but in most states insurance

companies have to file their rating plans with state insurance regulators and they must justify the use of those factors with the regulators. The primary way this happens is with the use of insurance company loss experience. The previous speaker referred to loss ratio. There are also a lot of more complex models discussed earlier today that don't incorporate necessarily at the beginning in terms of the analysis the premiums the companies are charging but are more focused on the likelihood of filing claims and the severity of those claims – more traditionally referred to as a frequency and severity analysis. Those analysis really focus on the risk of loss related to certain risk factors and ultimately then the risk of loss is determined for its companies to the premiums that are currently being charged and premium adjustments are then proposed.

Historically the analysis of these factors did occur in more of a univariate fashion – looking at one factor at a time and using some determinations but over time that has swung to more multivariate analysis – analysis that essentially accommodates or incorporates the fact that the distribution of a particular rating factor characteristic is not independent but actually do correlate. There are also cases where maybe insurance companies don't have sufficient internal experience to support the rating factors that they use either because they haven't necessarily been collecting those factors over time or they just may not have enough data internally to maybe support some of the things that they would like to do. The way that has been handled with regulators is either looking at what competitors are doing with those filings or potentially working with data providers and others to generate aggregate experience.

Ultimately the support of these factors really comes down to this idea that making sure that a factor is actuarially sound. The statement of principles on P&C insurance ratemaking which is a document that was developed by the CAS actually defines what actuarially sound means and essentially sums it up in three principles. That the rate is the estimate of future expected costs, the rate provides for all costs associated with that transfer of risk, and the rate provides for costs associated with the individual risk transfer. So, if a rate meets those three criteria it is then determined as actuarially sound.

An additional question I was asked was based on a lot of this discussion on rating factors was why do some companies choose not to use particular rating factors. The first reason which has bene highlighted today is that the loss experience doesn't justify the use. There are some companies that have evaluated some of the risk factors that may be used by other carriers and determined that it doesn't impact their book of business the way maybe it has for others and have decided not to use it so there have been cases and examples where we can point to that. The second reason is operational. There may be some things that operationally an insurance company cant do from a systems perspective or another perspective so they choose not to use a risk characteristic. The third reason which will pivot into a couple of additional items is really an internal company decision. A company may decide as the gentleman from Cure indicated that for internal reasons that they don't want to use particular factors. We all may have seen one example of this recently when Root insurance announced that within the next 5 years they will be discontinuing the use of credit based insurance scores. The reason as advertised by Root is not because credit based insurance scores haven't been shown to be related at least to expected loss but because they believe that it's the right thing to do to help to begin to eliminate bias in rating. As part of that action they have also called on other companies to do the same.

Speaking specifically of Root I want to talk briefly about some of the considerations related to UBI. While Root is discontinuing the use of credit based insurance scores its not doing so to be left in a vacuum and without a viable alternative. Root is one of a number of companies that we would classify as telematics only. In order to have insurance with Root you have to agree to have them monitor your driving behavior so every policyholder that purchases insurance from

Root will be base rated at least in part on their driving behavior as measured by a mobile app. Specifically, Root monitors mileage, distracted driving, braking, turning and time of day driven. In addition to other companies like Root and Metromile which are telematics only many of the major insurance companies also offer telematics options so customers can choose to sign up for these options and as a result rates are determined at least partially on the monitored driving behavior.

The use of telematics is really more of a direct measure of exposure to loss and really more direct than any of the rating factors we have used in the insurance industry. Historically, and this was a concept that was brought up earlier, many of the raring factors that are used today aren't really direct measures of loss exposure they are really what we call proxy measures and allow us to observe something that is potentially relate to the risk of loss. An example of this is prior claim activity. It is well documented and established that if a policy has a prior claim then the likelihood of that policy having a future claim is higher but having a prior claim doesn't necessarily mean or cause you to have a future claim so that is what we mean by proxy variables. Conversely, telematics isn't a proxy variable its really a direct measure of driving behavior and as a result one of the more powerful variables available for pricing today. Given this, its still true as well that telematics really hasn't necessarily become as widely used as its power may indicate. There are a couple of reasons for this. First, the percentage of policies at least right now being rated using telematics is still fairly low on an industry basis. The companies that are telematics only are still pretty small and currently only make up a small percentage of the marketplace and even for those companies with options at least historically the take up rate for their policyholders hasn't been substantial.

The COVID pandemic has actually increased that pace and is one of the things that has actually helped with the take up rate but its still going to take some time for that volume to grow. There are two other reasons that I think are even more important. UBI is really still in its infancy as it relates to the portion of the rate that is based on telematics. Even for telematics only carriers, many of them still use traditional risk characteristics and still base a significant percentage of the rate on traditional risk characteristics. As an example, based on Root's website, less than 25% of their rate is impacted on driving behavior so the majority of a rate even for a company like Root is still based on primarily the historical rating approaches. Part of this is due to the fact that it takes time to build up experience to build up the analysis and especially as you are talking about how much can telematics data replace some of the traditional risk characteristics its going to take even longer for companies to continue to build that up. While UBI certainly does provide more of a direct measure there are still some potential challenges as it relates to the bias issues and we can come back to that with questions.

I'll end with a couple of comments related to the race in insurance issues. There have been some efforts in states that have either restricted the use of or actually prohibited the use of certain characteristics. A few states don't allow credit based insurance scores and a few states don't allow gender or marital status so some states have at least in a bit of a one off fashion implemented something to deal with some concerns related to the bias in rating. But as I alluded to earlier and has been stated here today the history of the development of some of the more sophisticated rating has really been a function of better matching premium to loss and really hasn't been an issue related to intentionally attempting to try and proxy or discriminate against particular classes. Having said that, we are now faced as an industry and speaking as part of the actuarial profession there is a potential for unintentional bias that has made its way into our rates. Despite it being unintentional, the potential still exists and so as initiated by NCOIL and NAIC identifying this potential and developing solutions for potentially addressing it is a necessary and significant undertaking. But as has become clear by these discussions and

discussions at the NAIC and others this is not going to be easy to solve. Defining the issue, determining at what level that particular either rating factor or approaches are unacceptable and then determining the solution to deal with those unacceptable outcomes are going to take time and are going to take collaboration among everyone.

Thera are a number of potential solutions but each of them has advantages and disadvantages so the proposed solutions need to be carefully considered to make sure they will produce desired results, minimize unintended consequences, and ultimately as issues are discussed I encourage the Committee to partner with industry and the actuarial community to research the issues and determine the extent of the problem and identify proposed solutions. I look forward to the work of this Committee and the opportunity to collaborate and remain available to answer any questions I can.

Tony Cotto, Director of Auto and Underwriting Policy at the National Association of Mutual Insurance Companies (NAMIC), thanked the Committee for the opportunity to speak and stated that on behalf of NAMIC and its more than 1400 local regional and national member companies he appreciates the opportunity to join from Louisville, KY where we are fast approaching 200 consecutive days of protest following the death of Breonna Taylor and just this week our Mayor signed a sweeping Executive Order to join the fast growing ranks of state and local officials declaring racism a public health crisis. As communities and industries each tackle allegations of racism in their own way we commend NCOIL for engaging on this important topic at hand for the U.S. insurance sector.

Today's session and discussions are critical to the continued evolution and examination of the heart and soul of the insurance business – underwriting, rate making and fair treatment of all policyholders. We look forward to working with you in advancing a constructive dialogue around the entirety of this committee's efforts and applaud your commitment to actuarially sound, data driven policymaking and the fundamental principle of risk based pricing. I also appreciate Asm. Cahill's comments this morning that we have to start these conversations with math. I've seen these ongoing underwriting and rating discussions from many vantage points over the lest decade and a half where I've interacted with many of you as congressional and then NAIC staff then private practice representing carriers then a regulator in KY and now in NAMIC – from any of those views, math is the best place to start. While your counterparts at the NAIC are in the business of regulation and enforcement it must be elected and accountable lawmakers who establish public policy enshrined in the state insurance codes that govern the U.S. system. The laws that members of this body pass in your home states are what ultimately bind insurers and regulators. Although my remarks today are going to focus on rating factors and the use of insurance scores, I'll take a quick opportunity to make some brief broader observations.

First, mutual insurance companies are built on notions of community and inclusivity. The mutual model has a long and proud history of service to minority communities. Second, NAMIC and our members understand that like our legislative bodies and the communities we serve we are stronger when we include diverse backgrounds, skills, knowledge and perspectives of our policyholders, our vendors and our employees. Third and most importantly, NAMIC and its members are adamantly opposed to discrimination on the basis of race and unfair discrimination in general and we support legislative policies to prevent these practices. The elimination of racism improves every aspect of our lives, our relationships, our institutions, and our business communities. With that I will move into my presentation.

Today, I have been asked to provide a brief overview of credit based insurance scoring. For ease of reference to minimize confusion I'm just going to refer to them as insurance scores. As

you've already heard from panelists all morning and this afternoon much of the discussion around race in insurance underwriting is rooted in the alleged fairness and validity of rating factors that insurers use and because of this our conversation has to start with why these rating factors even matter. As simple as I can put it – good rating factors are factors that promote accuracy. Rating factors that promote accuracy fuel competition and fuel healthy markets. In turn, those healthy markets increase availability, improve consumer choices and reduce costs. Accuracy promotes competition and healthy markets reduce costs. That's as simple as we can make it. Carriers also have to consider things like credibility, objectivity and other things in concert with actuarial standards and principles. But the bottom line here as policymakers that you have to keep in mind is that when you decide to limit accurate rating factors you are making a tradeoff and that tradeoff is most likely gong to harm small insurers and consumers more than anybody else. The remainder of my remarks are going to be about one of those accurate rating factors – insurance scores.

Many of you have lived through the initial development and the use of these scores since the early 1990s and the development of NCOILs most successful Model on this topic. All the same I thought it would be important to provide a couple of operational notes about insurance scores. First, generally speaking insurance companies purchase these three digit scores from credit reporting agencies. They are end users of an insurance score – they don't develop them by and large. Second, insurance scores are not static – they are snapshots and a picture in time. They change over time as new information is added. Most importantly of all, insurance scores are not credit scores – they are not the same thing. Some of the underlying data is the same but they are not the same thing and not weighted the same way and not used the same way.

To that end I put together a comparison chart putting them right next to each other. These are not the only differences in the scores but they are the ones that seem to come up the most often and cause a lot of confusion. Please focus on the purpose portion because it makes sense and matters what you want to use this score for that you've purchased. Lenders use credit scores because they want to know if they are going to get paid back when they lend money – that's what a credit score is for. An insurance score is not that. Insurers aren't interested in whether or not an insured is going to pay back a loan. They are interested in whether an individual is less or more likely than another individual to experience a loss. Accordingly they are used differently. They are used for rating policyholders and applicants and saying you are more likely than not to have a loss – that is what an insurance score is all about. There are some other points on here regarding whether its determinative and you can use them in isolation and the answer is no – an insurance score is not determinative of whether or not you get a policy an insurance score is not used in isolation its used on combination with the other factors that Prof. Prince and Ms. Mosley have already started talking about a little bit today.

The notion that insurance scores are somehow inherently evil or used in the same way that credit scores were used to prevent people from getting loans is incorrect. Lets talk about what goes into the insurance score and more important lets talk about what doesn't go into the insurance score. This chart here lays out some of the items that go into the score. We've talked a lot today about objective data – these are objective data talking about here when talking about what goes into a score and what does not. They are objectively confirmable data and look at the right column and find that it is chalked full of data that is not used – race, color, national origin – none of those have anything to do with your insurance score. Why? Because your race, color and national origin have nothing to do with how you manage the items that go into your insurance score. Any suggestion to the contrary is deeply offensive. What you look like and where you come from have nothing to do with your insurance score. What you look like and where you come from have nothing to do with whether you pay your bills on time. What

you look like and where you come from have nothing to do with how much you use the credit that you have and how responsible you are in your pursuit of new credit. I am happy to tell you that I am a married Hispanic male in KY with a law degree and a 15 year old truck and I work for NAMIC – not one of those things would factor into my insurance score. My insurance score cant tell you any of that because it doesn't matter. What matters is how I behave when people extend me credit.

Next, I'd like to address some of the myths and falsehoods that surround many of the discussions and characterizations of insurance scores. Given this committee's focus lets talk about a claim we've already heard multiple times today that insurance scores are a proxy for race. This particular spurious accusation is in and of itself racist. The use of these scores is the opposite of racial discrimination because if anything it removes subjectivity and removes an opportunity for racial discrimination by removing subjectivity and removing personal judgment. An insurance score doesn't tell me anything about somebody's race. Insurance scores tell me about behavior.

I haven't heard it yet today but you often hear the notion that consumers don't have any control over their insurance score. Consumers are not some hapless bystanders when it comes to ways that they can improve their insurance score. There are things that we talk about a lot about how can I make it better and what can I do better to lower my rates - pay my bills on time and balance credit mix as not all credit is created equal. A credit card is very different from a mortgage but if you pay down your debts and you don't seek new credit at once in multiple forums or you don't necessarily need or have the capacity to manage there are ways in which consumers can control their insurance scores. I wont march through all of these as you've heard them many times and I'm happy to discuss alter but I do want to hone in on a myth that is a testament to the good work that NCOIL has done and continues to do in this space which is an appreciation and understanding that sometimes life throws you nasty breaking balls and policyholders and insurers need a way to address that. There is the extraordinary life circumstances provisions that are included in the NCOIL Model and that continues to be NCOIL's most successful Model and I think something we've seen throughout COVID responses is that these are extraordinary times and these are what these provisions are for to deal with these extraordinary times and let insurers and policyholders have the flexibility they need to deal with their insurance score issues.

At the beginning of the day Rep. Matt Lehman (IN), NCOIL President, talked about the importance of being data driven and insurance scores have been studied time and time again by independent entities, statisticians, governments, the FTC and the consistent findings across the studies remain that insurance scores are predictive, benefit most consumers, have nothing to do with income level and cannot be used to identify demographic groups which is to say they are not proxies for race. Continued study is a good thing. As the research continues, NAMIC and all of our member companies will continue to review the studies and materials on this and candidly on all rating factors as studies continue to come out as we look at and constantly reassess the value and predictive use of each of these factors. As I wrap up its important to realize that insurance scores work and that benefits consumers. The studies have shown that they benefit the vast majority of consumers and not only a benefit – they are either neutral or beneficial to the vast majority of consumers.

Even some regulators who initially were the most skeptical of insurance scores now accept their validity. That was made clear oddly enough on ' NAIC C committee call when a regulator spoke about having a historical opposition to credit and the use of insurance scores until they saw how they actually work and the fact that they have predictive value. Regulators have come a long

way on this and NCOIL has led the way. NAMIC and its members understand that underwriting is a system predicated on and sustained by fair and equal treatment. That means the use of objective standards of risk assessment that apply to every applicant and policyholder. Insurance scores are objective and prohibiting their use will result in higher rates for policyholders of all races. Thirteen years ago Chief Justice John Roberts wrote the way to stop discriminating on the basis of race is to stop discriminating on the basis of race. More recently, the great African American economist Walter Williams who just passed away this week quoted Louisville's own Muhammad Ali in his syndicated column when he said hating people because of their color is wrong and it doesn't matter which color does the hating it's just plain wrong. We agree and from NAMIC's perspective we are committed to working with you to advance in this area. I am Happy to stick around for questions after the panel.

Marty Young, co-founder of Buckle, thanked the Committee for the opportunity to speak and began with an introduction about himself. He is the co-founder and CEO of Buckle one of the so called insurtechs/fintechs that is part of the movement of digitalized insurance. I come from a background of over 20 years in turnaround restructuring in special situations. I'm known as a chief restructuring officer, COO in companies going through a acute periods of change. I've been involved in and led over $30 billion dollars of transaction value. I'm a West Point graduate, a former U.S. army infantry officer and a Chaplin in the national guard. I am proud to have served in the national guards of MA, NY and currently DE. I am a certified turnaround professional, certified insolvency and restructuring advisor, and have a gov't security clearance. Through my educational background, I have an MBA from the NYU Stern School of Business and a master's degree in operations research from Georgia Tech where I serve on the advisory board of the school of industrial system and engineers of Georgia Tech.

I'll first introduce you to Buckle and then focus more on some of the key issues that the Committee is investigating today and our vantage point that we bring to the conversation. Buckle was founded to provide comprehensive financial services to both gig workers as well as the platforms they work for. So think in terms of Uber drivers, Lyft drivers, Instacart drivers, Amazon drivers – emerging gig economy systems that are evolving. What we saw was that the financial infrastructure needed to provide the insurance and credit for this emerging economy simply didn't exist. What we did was start the process of building the only financial services company solely focused on this new customer segment and system and we built and acquired significant financial infrastructure and we own a 47 state licensed carrier domiciled in IL called the gateway insurance company and we are also in the process of acquiring a couple of additional carriers. We have also built a claims administrator licensed and domiciled in GA, a cell captive carrier in VT and we have numerous strategic partnerships in the reinsurance industry as well as in various types of digital and non digital MGAs. We've assembled a world class mgmt. team including four former senior USAA executives and our goal is to become the USAA of the gig economy and a model very centered in and around serving a group of members that we see is the emerging middle class of the U.S.

So, what is the problem that we are fundamentally solving. That problem is that 40% of American households are subprime and have a 650 or lower credit score and that group of Americans as well as immigrants and other aliens here are all in this sort of group of folks that because of their credit score are heavily penalized in both the credit and insurance industries. The U.S., for the most part, in order to have upward economic mobility, car ownership tends to be one of the key factors in getting that. However, for a subprime household car ownership is also less of a tool of upward mobility and more of a transportation trap. It can often lead to the cycle of economic hardship and cycle of poverty through self reinforcing mechanisms predominantly through credit score. You've already heard several distinguished speakers

earlier talk about the issues of credit scores in the insurance industry and from everything we have seen we agree that if you are subprime you are non standard and you can easily pay $50-100 more for your car insurance regardless of where you are in the U.S. Adding insult to injury, many of these folks are also paying 1000% in interest and fees in their auto loan and leases. The insight we had was that we can help people escape this transportation trap by enabling and supporting gig work at fair prices and effectively move up the socioeconomic ladder.

The way we thought about this was that a person who is subprime in the U.S. – the reason they are such is because predominantly of their income. Nothing drives a credit score more than income. If you have a $15 per hour job in the U.S. you are overwhelmingly subprime. The correlation to hourly wages to credit score is linear across all ages. What we learned was that the folks that are in most need of basically getting a car and moving up the socioeconomic ladder are folks that are making wages in the $10-15 per hour range. If they can somehow move their vehicle which tends to be a very large burden on their lifestyle from a cost to a cost of good sold we can transform the middle class. According to AAA, the cost of owning a car each year is about $9,000 but if you only make $15 per hour you only make $30,000 per year so that means you cant afford $9,000 per year for your car so you end up moving down to the B lots and the non-franchised dealers and the buy here pay here lots and non standard subprime insurance companies and what you see is that because they cant really afford those that a lot of us take for granted in the prime world, they basically have to pay a tremendous amount of extra in terms of their insurance as well as their credit expenses.

What we call this is a credit score tax and this tax because of its impact on insurance and credit results in basically an additional 10-20% more to Uber, Lyft, Doordash and others in their driver supply because the folks driving the gig economy are generally making $10-20 an hour depending on where they are in the U.S. and although their vehicle is being used as a source of revenue generation and things like insurance and even the cost of credit become costs of good sold rather than household costs the reality is that this is squeezing them. Some anecdotes – in Atlanta, GA where we started many of our drivers may have perfect driving records but because third credit score is below 600 they'll pay easily 50-100% more than basically a quoted standard risk. 50-100% more for many of these folks is 11-14% of their annual take home pay so for the folks working in the gig economy the way you have to think about it – your Uber driver that may have gotten you to the conference today is spending 11-14% of their annual take home pay on insurance. When you start adding things like the cost of the car itself and fuel, the tax on the system is absolutely overwhelming. In fact, I submit to you that this credit score tax isn't just detrimental to the drivers but the essential workers in this era of COVID where we all are relying on these drivers to deliver us packages form Amazon and medicines from pharmacies and groceries from Instacart and so on and so forth.

So what's happened is that this credit score tax basically reverberates throughout the entire value chain. In this diagram there are three very distinct demand curves – the rideshare demand curve like Uber and Lyft; the food delivery demand curve which is Grubhub, Uber eats and Doordash and then package delivery demand curve like Amazon and Instacart. Those demand curves intersect the same supply curve because they are all the same drivers. If you look at what's in the supply curve you see sort of the cost of labor but then you start adding in the cost of standard insurance and prime financing.

So as a prime risk as a standard driver my rates are really low. There is a cost of depreciation and maintenance, a cost of insurance that the TNCs have to maintain and then there is an extra cost stuck in the system that is really tied to the credit scores of these drivers. I submit to you that credit score effectively hurts the whole system and if you are a consumer of these services

then this cost is basically hurting you as well because basically if we can eliminate the credit score tax in the system you would see lower costs of rideshare, more work opportunities for gig workers and more revenues for every single TNC.

Our mission is to help people achieve economic freedom and we have eliminated credit score as an underwriting metric from all our underwriting. We don't use credit score. Basically, what we have learned is that by not using credit score and by using very reasonably admitted paper filings with normative factors, nothing crazy that by any means would be controversial, we are able to reduce folks insurance costs by 50% in many cases because of the credit score tax. By doing so this is life changing. Saving $50-100 a month for many people on this call is great but doesn't really move the needle but if you make $15 per hour and $30,000 a year you save $1,200 a year in car insurance, that is transformative. That is the difference between having mac and cheese for dinner and having a sold meal. That's what this is fundamentally about.

The way we approached this was that we realized that in addition to eliminating credit score we also had to re-visit the whole insurance business model. I come from a credit background and have worked with pretty much every major credit institution out there and hedge funds. What I would explain to you is that what the credit industry learned a long time ago was that the idea that somebody would walk into a bank sit down in front of a banker and that banker would make a decision whether or not to issue a loan to that person was a fundamentally flawed model because their bank was trying to maximize the amount of underwriting profit they could make on that person walking through the door. What the banking industry began to realize, and many banks got there before the financial crisis, is that they had to stop focusing on making underwriting profit as fast as possible. The banks that figured that out before 2008 were bullet proof – JP Morgan was bulletproof. Other banks were out there basically trying to make underwriting profit on their borrowers and they ended up in the middle of the financial crisis and some are no longer here today and others have been swallowed up by larger banks. It was decided that credit banks needed to stop focusing on making underwriting profit and focus on the business of originating paper into the capital markets as efficiently as possible.

The model credit paradigm today is you have issuers whether they are credit cards, or car loans or corporates, give investment bankers going out there essentially marketing the book. Yes, banks do originate the paper and they are essential to do that but they actually don't set price, they use the capital market system to set price and they set up servicers to go and do this in scale. To show where we are in 2020, most people on this call today could decide to buy a house and pay a $500 fee to any major bank and get a $500,000 mortgage. If you ask the bank the question who actually is giving out the mortgage they will say it moved out to the market, not the bank. Through this shift in paradigm we are able to sustain it by plugging in effectively all sorts of different balance sheets whether from the Fed, federal gov't or the global capital markets themselves.

The insurance industry, particularly the non-mutuals, need to start thinking this way today and for us to do something so revolutionary like stop using credit scores we had to basically divorce ourselves from the idea that we would make underwriting profit on our members. We would market them and would fairly represent them to the reinsurance industry and let that industry's actuaries do what they do well. In fact, I think the reinsurance industry because they see risk across the entire value chain of all insurers they are actually best situated to set price. Yes, we do have proprietary data and other tools but by basically acting as a carrier in the model where we are not really making underwriting profit but really marketing the risk profiles of our customers not using credit score into the capital markets in a fee model versus an underwriting model we can bring in market efficiency and eliminate the credit score tax. We have had a

tremendous amount of success doing this in Georgia and soon we will launch in most of U.S. in 2021.

Let's talk about the financial infrastructure required to do this. In order to be an actual fiduciary to our members required a whole new framework that we took from modern banking. Most insureds think that the insurance company is their fiduciary agent but nothing is further form the truth. Insurance companies are fiduciaries of the insureds. In fact, insurance agents in many of the exams throughout the U.S. at the state licensing level have questions making sure they understand that they have zero fiduciary duty to the insured – they have 100% fiduciary duty to the insurance company. So, the insurance company in using all these types of underwriting factors are really designed to make as much profit as they can from the insureds. They are thinking the way banking thought 25 years ago and that is not the way it needs to be moving forward. Unfortunately, particularly in the subprime markets a lot of those folks are not well educated and not wealthy and they make huge payments into the insurance industry and they actually believe that insurance companies and agents have their best interest at heart. In this model, we are able to take on that role by basically deconstructing the value chain and setting up a system where we can be their fiduciary and take their data and get into the capital markets and find the best reinsurance structure for them and basically make the market and that's the way modern credit works today and we believe that's the way insurance has to go.

This isn't so much about trying to get to better underwriting factors to get more profit off of insureds but rather redesigning the system as a whole. By doing this we see an opportunity to not just eliminate credit score tax in insurance but also in credit itself. As we build up the platform next to the insurance company which is a credit platform we are getting a lot of interest and traction from the credit markets who agree with us. The idea of using a credit score in order to make a credit decision probably isn't the right way to think about the complex world we live in today. People are complex and their lives are changing. What's happening is that we want to be part of their upward trajectory and encourage and sustain a path toward upward economic mobility. This is less about using credit score and more about creating and enabling a sustainable market driven insurance system.

Dorothy Andrews, MAAA, ASA, Chairperson of the Data Science and Analytics Committee at the AAA, thanked Chairman Breslin and the Committee for the opportunity to appear today to lead off presentations from the AAA. The Academy is the national professional association for actuaries from all practice areas in the U.S. whose mission is to serve the public and the U.S. actuarial profession. The Academy is nonpartisan, objective, and independent. It assists public policymakers on all levels by providing actuarial expertise on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States. In a moment you will also hear from my Academy colleagues, Lauren Cavanaugh and Mary Bahna-Nolan on practice-specific concerns related to your charge. But first, I would like to discuss some of the work and exploratory discussion undertaken by the Academy's Data Science and Analytics Committee, which I chair.

The need for a Data Science and Analytic Committee resulted from the work of the Academy's Big Data Task Force, which was charged to: Understand the impact of big data and algorithms on the role of the actuary; Examine the framework of professional standards to provide guidance for working with these new tools; and work with policymakers and regulators to address issues related to their use. The efforts of task force produced a monograph titled, Big Data and the Role of the Actuary. The charge of the Data Science and Analytics Committee to "To further the actuarial profession's involvement in the use of data science, big data, predictive models, and other advanced analytics and modeling capabilities as it relates to actuarial

practice. And, to monitor federal legislation and regulatory activities, and develop comments and papers intended to educate stakeholders and provide guidance to actuaries."

The evolution of the data scientist presents challenges to the actuarial profession. The U.S. Government Accountability Office (GAO) identified a couple of these challenges in the report it issued last year on the benefits and challenges presented by innovative uses of technology. The GAO report states: Models are being developed by data scientists who, unlike actuaries, may not fully understand insurance-specific requirements, such as setting premium rates that are not unfairly discriminatory, and may struggle to measure the impact of new variables used in the models; Data scientists may be unfamiliar with insurance rules and regulations and may not understand how to communicate their work to state insurance regulators. Additionally, data scientists may not adhere to a set of professional standards equivalent in scope and moral and ethical values to those of the actuarial profession. A review of professional standards of organizations such as the American Statistical Association (ASA), the Data Science Association, and the Certified Analytics Professional organization reveals significant differences between their professional standards and those of the American Academy of Actuaries.

The Committee I Chair will develop a Data Science and Analytics Committee Big Data & Artificial Intelligence (AI) White Paper. The purpose of the white paper will be: Demonstrate the high ethical and professional standards that actuaries operate under to deliver value to insureds using objective actuarial, statistical, and AI methods; Discuss the changing nature of actuarial practice and the benefits of big data and predictive algorithms with a growing focus on human behavior to improve risk selection and the customer experience; Examine the work of insurers to control for systemic influences and socioeconomics by rigorously examining and eliminating the potential for biases to impact every step of the modeling process; Consider the willingness of insurers to work with regulators to resolve big data, algorithm, and AI disparate impact concerns and to promote a positive transformation of the insurance industry. It is important to explore resolutions that do not hamper the development of technology that works for the benefit of consumers.

The issue brief is expected to lay out a road map for working with regulators to resolve issues in the following areas: Standards for emerging data sources; Evolution of actuarial standards of practice; Ethical issues related to artificial intelligence models; The reliability and regulation of external data sources; Controlling for systemic influences and socioeconomics; Regulatory concerns impacting the work of the actuary; Impacts of big data to transform the practice of insurance; Behavioral data science impacts on traditional actuarial practice. On this last point, I would like to share a quote from Sherry Turkle of MIT. She states that "Technology does not just change what we do, it changes who we are." This statement reminds us that we have to be mindful and watchful of the behavioral effects to technology to shape the data we study and the models built upon that data.

Insurance alone cannot solve all the social ills in society, but insurance models certainly should not contribute to them. The committee will provide information to actuaries on protecting consumer data to facilitate that algorithms are: Appropriately transparent; Explainable and interpretable; Free of unfairly discriminatory variables and related proxies; Based on variables with an appropriate relationship to the risk being insured; Appropriately granular to guard against unintended disparate impacts to protected classes; Attended to with human oversight to ensure controls and metrics are in place to monitor the continued fit and appropriateness of models for the purpose they were designed; Validated for quality and reliability by actuaries or experts who understand insurance company target markets, product lines, and insurance liabilities. By providing information in these areas, models can become more accessible for

critical review and remediation before being exposed to the public, reducing the likelihood of these models to cause harm.

Finally, because Lauren and Mary in a few moments will be focusing on property/casualty and life actuarial concerns, I would like to spend a moment to relate some of the work the Academy is doing on health equity. While this is an initiative that is being worked on by another group than the one that I chair, I will provide you with just some highlights of this effort; once the Academy has had a chance to publish preliminary outcomes early next year, we can be available to NCOIL to more closely address them with you. This work has been undertaken to further the U.S. actuarial profession's commitment to health equity throughout the health care system by looking at current practices that potentially perpetuate or exacerbate adverse health outcomes experienced by people of color and/or historically underrepresented groups.

Specifically, the work is organized around issues concerning benefit design, provider contracting/network development, pricing, and population health. Questions that are currently being probed include: Does the use of historical data embed disparities in projections? Are assumptions appropriately determined and applied? And what sorts of analyses should be performed to explicitly identify inequities? So, again we will keep NCOIL apprised of the Academy's progress on this work as it progresses. With that, I will conclude my portion of the Academy's prepared remarks and will now recognize my colleague Lauren Cavanaugh.

Lauren J. Cavanaugh, MAAA, FCAS, Vice President, Casualty stated that on behalf of the Casualty Practice Council (CPC) of the Academy, I commend the NCOIL for organizing this exploration of important questions regarding race and insurance. Thank you for inviting me and other representatives of the Academy to share our thoughts with you. I will speak specifically to P/C insurance, while my colleagues will address other practice areas. My comments today will address: Certain actuarial guidance that is relevant to today's discussion; Data quality considerations; Disparate impact analysis; and Use of socioeconomic factors in auto insurance.

First and foremost I'd like to highlight that there is helpful actuarial guidance related to the issues at hand. Mr. Mosley referenced them in his remarks – there are a series of documents called the actuarial standards of practice and they provide guidance on techniques, applications, procedures and methods that reflect appropriate actuarial practices in the U.S. I think it will provide helpful background info to you as you make certain determinations in the future. One standard I'd like to put particular focus on is the standard on risk classification. This standard provides some perspective on the question of unfair discrimination in rate setting and as the Committee continues to look into these topics I want to note that in order to properly discuss unfair discrimination its important to have a clear definitions of fairness. Fairness is defined in many different ways and what may seem fair to some will seem unfair to others. For U.S. actuaries when we focus only on the question of fair insurance rates we are guided by our actuarial standards and using the risk classification standards in guidance we see that rates within a risk classification system would only be considered equitable or fair if differences in rates reflect material differences in expected cots for those risk characteristics. Mr. Mosley discussed this as well.

What we mean by expected costs is for example in auto insurance that would be the expected cost would be driven by the expected number of auto claims and the average cost if a claim occurs. In order for a particular risk characteristic or classification to be considered fair it would be if that risk characteristic reflected a material difference in expected costs – either the frequency of claims or the average cost if a claim occurred. This is demonstrated if it can be shown that the experience correlates to a particular risk characteristic. There can be significant

relationships between risk characteristics and expected outcomes where a cause and effect relationship cannot be demonstrated and that is all included in the risk classification standards and provides a healthy backdrop when you consider the question of fairness in insurance rating.

Others actuarial standards provide helpful guidance on these related topics would include our standard on data quality and I'll speak about that shortly. There are a few others listed in my comment letter. I would like to move to address some of the specific topics being looked at. One area that we think should be addressed is the use of data in these risk classification systems and when I use that term I mean the systems that are used in order to get to the premium. Data available in pricing P&C insurance coverage has been increasing and with that the industry has moved from relatively road rating classifications to increasingly segmented classification structures. Others on the panel have discussed that as well. The actuarial standard on data quality says that an actuary should review data for reasonableness and consistency unless in the actuaries professional judgment such review is not practical or not necessary and oftentimes there are practical limitations to what the individual actuary can do review in the growing volume of available data.

In 2017 and again in 2019 the auto insurance committee of the AAA worked with the NAIC to conduct forums on predictive modeling and in insurance the question of data quality was discussed. One of the ideas that rose from those discussions was a concept of one or more independent third party organizations that could verify and certify the various external databases that might be used by insurers in their predictive models or other data analysis. Of particular interest to this committee are concerns whether some of the external data sets that are being used in risk classification structures might contain hidden biases or serve as proxies for prohibited characteristics. Hidden racial biases or other biases like proxies for prohibited characteristics would be one of the things that a third party organization could look into. Some other related issues that could be addressed with this mechanism would be to address issues of accuracy and relevance of the data – how old is the data being used? When an insurer pulls data from multiple sources related to the same insured name John Smith how certain are we that we are getting the right John Smith. These are all questions on data integrity that may be addressed by a new way of looking at regulating the way external data resources are used by insurers and we are happy to discuss that further with NCOIL.

Turning to the topic of disparate impact analysis, investigation into whether risk characteristics have a disparate impact on certain protected classes could provide insights into key questions regarding unfair discrimination. For example, it has historically been established that there is a material difference in expected cost for drivers that have no motor vehicle violations versus those that do. If law enforcement practices differ based on race however, risk characteristics that use motor vehicle violation history may have difference expected cost differential for black Americans than for white Americans. We think that looking into this issue of whether there is disparate impact and investigating that might be proper.

I also wanted to mentioned the use of socioeconomic factors in auto insurance ratemaking. As discussed earlier more data has been used and with the advancement of technology risk characteristics that may be more direct indicators of outcomes are increasingly being utilized and we heard a lot about that today. Rating variables that are linked to facts about driving behavior like those derived from telematics like vehicle safety features and UBI may reduce the predictive power of other variables that could be seen as indicating only proximal effect such as insurance scores. While historically those insurance scores have been seen to be very predictive that predictive power may diminish as we use more and more of these other

variables. Thank you and that provides an overview of my comments and we look forward to discussing further with you.

Mary J. Bahna-Nolan, MAAA, FSA, CERA, at the AAA, thanked NCOIL and the Committee for providing her the opportunity to present to today. I am Mary Bahna-Nolan, a life actuary and volunteer for the Academy. I would like to reiterate the points of my fellow Academy members, Dorothy and Lauren, that we share the goal of identifying and exploring issues pertaining to race, diversity, and inclusion and ways to address practices that could create barriers to obtaining insurance coverage, or conversely provide incentives for inclusion to, insurance products. My comments will focus more specifically on considerations pertaining to life insurance and life insurance risk selection.

While the issues that the Committee is looking at are transcendent on all lines of insurance, an important issue that distinguishes life insurance from other types of insurance is that the purchase of life insurance is a voluntary transaction between a consumer and an insurance company. Further, the purchase is an independent, or stand-alone decision not mandated as a result of another purchase (e.g. obtaining a mortgage). This emphasizes the importance of the risk selection or the underwriting process to ensure the insurability of the applicant, the suitability of the insurance from both the financial need for the insurance, and the ability to pay for the insurance. As such, the determination of the insurability is often a factor of both medical and nonmedical data.

The risk selection or underwriting process is often only done prior to a policy or contract issuance with rates that are, at some level, guaranteed for the life of the policy or contract and for contracts that are non-cancellable by the insurer, other than for non-payment of premium lack of policy performance. The underwriting process for life insurers has a long history of change as new learnings and research, tools, products, data, and computing power have evolved. What hasn't changed is that the risk classification process is foundational to the underlying principles of insurance. The purpose of underwriting is to align the risk characteristics with an expected outcome and to group similar risk pools.

The process of risk classification involves gathering data to understand the applicant's unique risk profile, including personal, financial, and health-related data provided by the applicant. In many cases, verification of such data is obtained through additional data sources and/or review of the applicant's medical records. The collection of this data helps to align an applicant's risk profile with the aggregated risk profile used by the insurer in establishing product price for a particular risk class. This risk alignment is often demonstrated by statistical or other mathematical analysis of available data. This data may include direct experience of a carrier or reinsurer, medical or clinical research data, and expert opinion. In the risk selection process, it is common that different paths and/or data elements are gathered for individuals based on what is disclosed on the application or learned throughout the process, the age of the applicants, or the amount of insurance requested.

Throughout the history of underwriting, new data sources and ways to use data have arisen. New data or data sources should be evaluated to assess their impact on risk classification. When new data is evaluated, it is evaluated for its protective value as an additional piece of data or replacement for existing data element(s) in the risk classification process. Mortality studies and/or retrospective studies are often used to assess the value of data that are or can be used for underwriting. Any changes to risk classification systems are evaluated and built into a product's design and pricing. Regulations are in place that govern data that may be used in the underwriting processes such as HIPAA, FCRA, and the Unfair Trade Practices Act.

In life insurance, actuaries and underwriters have different but interdependent roles related to risk classification. Actuaries: Determine insurance pricing and risk pool characteristics; Develop mortality assumptions for each risk pool; Analyze changes to risk classification because of the impact to critical actuarial activities; and Determine policy reserves through modeling and risk management. Underwriters: Follow established risk classification principles that differentiate fairly on the basis of sound actuarial principles and/or reasonable anticipated mortality experience; Are accountable for developing the underwriting process and classifying applicants into risk pools; and Assign risks to groups based on the benefit costs of the risk pool.

Actuaries and underwriters work together to align risk classification with mortality expectations for each risk pool. Changes in the risk selection process are often analyzed to understand the impact a change may have on risk selection and the potential for adverse selection. New data sources are analyzed as to their relevance, credibility, and quality. Analysis around new data inputs includes whether the data is fit for purpose, does not unfairly discriminate or include unintended bias, and appropriately classifies risks. In addition, compliance with existing laws such as HIPAA, FCRA and Unfair Trade Practices is an important consideration in how data is used and provides consumers the ability to know and agree to which data is used in the risk classification process and the ability to dispute inaccuracies in the data.

Recently, there has been an increased effort in the life insurance industry to lessen the more invasive and time-consuming elements of the risk selection processes such as the collection of bodily fluids (e.g., home office specimens [HOS] and blood) and physical measurements, often collected from a third-party paramedical professional that comes to an applicant's home or place of work. These changes are often described as "accelerated underwriting," and are not limited to the removal of fluids and other measurements. Accelerated underwriting is another part of the ongoing evolution of underwriting. There is often a trade-off between the predictability of mortality experience and evaluation time. Different risk classification methods and tools may impact the overall level of mortality but also the expected pattern of mortality, including the time it takes for the benefits of underwriting to wear off. The use of alternative data, predictive models, and algorithms may be used to reduce the added expected mortality cost from removal of more traditional underwriting data (i.e., fluids). Time is required to understand and realize the true impact of the emerging risk classification methods on the consumer experience.

The use of predictive models and algorithms, along with additional data sources, may be used to forecast probabilistic outcomes around relative mortality or risk. Models incorporate statistics to identify interdependencies among data elements and correlation to the risk characteristics being studied. Algorithmic underwriting is not new to life insurance. Underwriting guidelines have long been based on various algorithms. The use of predictive models and improved computing power has helped to remove some of the human application or judgements in the algorithms historically used. Of particular interest noted by this Special Committee are concerns as to whether the use of alternative, nonmedical data sources and the use of predictive models and algorithms inject hidden biases or serve as proxies for prohibition of risk selection based on protected class information, most specifically race. The use of algorithms or an alternative data source does not remove actuaries or underwriters from adherence to the principles of risk classification; risk classification must be based on sound actuarial principles related to actual or reasonably anticipated experience to assign risks to groups based upon the expected cost or benefit of the coverage or services provided.

There is a strong correlation between socioeconomic factors and mortality/morbidity experience. The racial aspect of socioeconomic differences is systemic beyond insurance application. Life

insurers do not collect information or directly use protected class information of race, religion, education, or ethnicity in their risk classification or rate-setting processes. Therefore, additional analysis and judgment is necessary to ensure proxies are not unintentionally discriminatory against one of these protected classes while not removing the ability to correctly identify mortality and morbidity differentials important to the risk classification and risk pools established.

Actuaries are bound by a code of conduct. The purpose of this Code of Professional Conduct is to require actuaries to adhere to the high standards of conduct, practice, and qualifications of the actuarial profession, thereby supporting the actuarial profession in fulfilling its responsibility to the public. Actuarial standards of practice (ASOPs) are developed by the Actuarial Standards Board and are binding on members of the U.S.- based actuarial organizations when rendering actuarial services in the U.S. The Actuarial Standards Board regularly adds and updates ASOPs. Failure to meet applicable standards of practice is a violation of the Code of Professional Conduct that may result in an actuary being brought before the Actuarial Board for Counseling and Discipline ("ABCD"). An adverse ABCD finding can result in discipline ranging from reprimand to expulsion from U.S. based actuarial organizations.

Lauren discussed three of the relevant ASOPs that also apply actuarial standards related to risk classification for life insurance: ASOP No. 12 on Risk Selection, ASOP No. 23 on Data Quality, and ASOP No. 56, which became effective October of this year, on Modeling. In addition, the following are some of the more relevant ASOPs which also apply pertaining to the risk selection process for life insurance and the analysis of data and models in this process: ASOP No. 25, Credibility Procedures; ASOP No. 54, Pricing of Life Insurance and Annuity Products; Setting Assumptions (currently being drafted).

The purpose of ASOP No. 25 is to provide guidance to actuaries with respect to selecting or developing credibility procedures and the application of those procedures to sets of data. This applies to the risk classification process when the actuary is evaluating subject experience for potential use in setting assumptions without reference to other data and in the identification of relevant experience and the selection and implementation of a method for blending the relevant experience with the subject experience, including the relevance and applicability of alternative data sources and model inputs. Such relevant experience should have characteristics similar to the subject experience, where the characteristics the actuary should consider include items such as demographics, coverages, frequency, severity, or other determinable risk characteristics that the actuary expects to be similar to the subject experience. In addition, the ASOP requires consideration for the homogeneity of the data and the actuary should consider the homogeneity of both the subject experience and the relevant experience and consideration that within each set of experience, there may be segments that are not representative of the experience set as a whole.

ASOP No. 54 provides guidance to actuaries when performing actuarial services with respect to the pricing of life insurance and annuity products, including riders attached to such products. This standard is applicable when a product is initially developed or when charges or benefits are changed for future sales. The other ASOP around the setting of assumptions helps to provide guidance when they perform those services around assumption setting which would include the mortality levels the risk categories and risk classification or risk cohorts or pools. As Lauren noted, the full list of ASOPs is extensive, and it is certainly possible that guidance from others not noted above may prove useful to the Special Committee's ongoing discussions. Again, I appreciate having this opportunity to share with NCOIL thoughts on the important issue of race in the risk selection and classification process for life insurance and look forward to working with this Special Committee as you seek to address important questions that have been raised.

Rep. Lehman stated that his question goes to Mr. Cotto and Mr. Poe. When we start talking about all of this data that goes into all of these factors, as the risk expands should that criteria change? For example, I believe with Cure the maximum coverage I can get is $25,000 per person and up to $500,000 per occurrence. Mr. Poe replied no and stated that Cure is statutorily mandated as an admitted carrier and like any other carrier is required to offer up to $250,000 worth of coverage per person on bodily injury – we have all the standard coverages.

Rep. Lehman asked what percentage of Cure's policies are those types of limits. Mr. Poe stated that he would say 75% of Cure's book is state minimum liability coverage because Cure is basically the only insurer that doesn't use credit scores and is the place of last resort of people of lower income. Rep. Lehman stated that his concern deals with more sophisticated buyers and different criteria for higher risks. If a carrier is going to put out for me such as a $500,000 underlying with a $2 million umbrella - if they are going to put $2.5 million on the line every time my 16 year old gets in the car should there be some criteria to that that's different then someone that's putting out the state minimum limits? The other question deals with data being collected – how much of the data is accessible by me? Clients have asked me in the past if they can take the scoring data that has been collected by the carrier and have access to it when they shop for insurance.

Mr. Poe stated that regarding exposures, that is built into the rates. For every coverage that we offer for every carrier in the country we have a base rate associated for what that coverage is and as you buy more coverage we have a factor that multiples times that base rate. So if you have bodily injury coverage with any company for car insurance you have what's called a filed base rate and lets say its $100. That $100 has to associate with the lowest amount of coverage that you are offering so if its bodily injury coverage and the minimum for the state is $15,000 we actuarially come up with a base rate for $100 for that amount. If you buy $250,000 worth of coverage for bodily injury there will be a multiplier which is what we call a relativity that's multiplied by that $100 so someone with a $250,000 bodily injury limit is going to have a 2.3 and 2.3 times $100 is $230 and that is how we develop the rate.

The problem is that if there is a carrier that only wants to give lower rates to higher income drives you are stuck with that model of always having a base rate of $100 so the only way to eliminate that and give preferred rates to those with higher income is to create multiple affiliates with the same trademark name. That's why in NJ there are two Allstate's, two State Farm's, and three Geico's because that way you can have different base rates based on a criteria like an income proxy that will first be applied to you as a driver. So first you answer the question do you have a four year college degree and a high paying job. If the answer is no then you are only eligible for the higher base rate company so its similar to what we saw in the 1960s with redlining and housing. Regarding what Mr. Cotto testified to just because objective factors are involved in your insurance scores then they are not necessarily having a racial impact to me flies in light of the whole reason why we are having this meeting. Obviously there are proxies to a factor so you might not use race as a question for car insurance but if you have a corollary proxy for race then you can have an effect that would be obviously impacting race which is the whole point of this meeting.

Mr. Cotto stated that he appreciated Mr. Poe's explanation on base rates because that is important to consider. As to the question of whether higher risks have more or higher criteria I think that comes into the policy realm that legislators have to decide. If someone wants additional coverage I think it logically makes sense that you would ask more questions. I think that's the general sound direction to go. In terms of the data question and how much consumer access there is, on the credit side that is governed by federal law and consumers can obtain

their credit report and in fact its encouraged that consumers check their credit report regularly to see if there are any mistakes. That's a good thing. If you are getting at whether consumers can see how the rate is calculated and how much each factor weighs the answer to that is no.

Mr. Poe stated that one of the things we've talked about is insurance scores and why it does or doesn't correlate to income. I've sat for hours with statisticians who create the insurance scores – they have to be 90% correlated to credit scores otherwise they wouldn't buy credit scores from the agencies that create them. The differences are very minute. More importantly, what most people don't realize is that when we talk about credit scores being objective and everyone having an equal opportunity – the highest element if a FICO credit score, 35% of it, has to do whether you pay your bills on time – payment history. Number two is credit utilization, 30%, how much available credit you have and how much you use of that available credit. Your available credit is 100% tied to what you state as your annual income.

The reason why income is so correlated to credit scores is that if you take a poor person and a rich person and they all pay their bills on time then that 35% weight factor has become irrelevant so the second most important factor in your credit score is going to be how much of your available credit is being used right now. And when you are poor and make $30,000 per year they don't give you a $30,000 credit line they give you a $1,000 credit line and if you use $900 of it you are using 90% of your credit limit so your credit score will drop at least 90 points simply because you used $900 of that $1,000 credit line. A lot of people debate whether credit scores correlate to income. That is why they do – because your salary is the basis of credit available.

Rep. Lehman stated that he had to leave the meeting in order to deal with an issue back in Indiana. Rep. Lehman thanked everyone for participating in this process. A lot of information was presented and it was done respectfully. The video and audio recordings will be available on the NCOIL YouTube channel for review. The Committee will discuss next steps once everything is analyzed.

Rep. Edmond Jordan (LA) thanked everyone for presenting today and stated that his question is for Mr. Poe. Regarding lack of notification if an applicant is rejected for insurance, are there any states that in fact require that notification. Secondly, is there any development of some legislation around having access to your insurance score. Mr. Poe there is simply no legislation in any state he is aware of that requires a carrier if it rejects you on the basis of your education or occupation that you get notified of it. The FCRA requires notification of people in writing when you have an adverse decision based on credit. One of the things that happens in NJ with Geico is that you are not allowed to reject a driver based on just their education or occupation alone but Geico complies with that by having three companies in NJ and saying that we are a group of companies so we comply by not as a group rejecting a driver based on education or occupation alone. But they are rejected by each of the preferred companies based on those criteria so they are able to say you are eligible for the third company that we write that complies as a group with the prohibition laws.

Asm. Ken Cooley (CA), NCOIL Vice President, stated that he has a question generally for anyone that wants to answer it. I am going to make an analogy to climate change. Climate change has risen in importance and we have seen companies look at what is the pathway that they can do given their enterprise to do more on climate change and then to promote that fact and tout it and make it part of their narrative. The question would be in this present environment just as we've heard with Buckle and Root what do you think the role of marketplace forces is of companies really trying to do something different to give them an edge. That's not to take away from the analysis today but its more to get at there are plenty of companies out there that

actually saw a niche opportunity to do something different than the rest of the marketplace and went after that and excelled big time. We have a competitive marketplace but what are your thoughts that given the current environment like the climate change environment that companies might try to differentiate.

Mr. Poe stated that the reality is that here is no competition for lower income drivers in our marketplace and that is because they produce the highest losses and the highest expenses. The industry can make enough money, billions of dollars, form high income drivers so why would they be in this quadrant. If you talk about Root its early in infancy and has grown exponentially very quickly and we have to wait for loss results to come in. If you look at other companies like SafeAuto they only write in states in which they are permitted to only write the state minimum liability insurance so they cap their total exposure to a certain extent.

In the marketplace we are in there is simply no competition. Mr. Poe stated that 45% of those that leave Cure go uninsured and we are the place of last resort. It simply costs more money to deal with people calling you every day saying I cant make the payment so can I make this. And people that get into car accidents if you are lower income you are going to file every small claim that you can because anything over $500 is something that you cant afford. Wealthier people have $1,000 in their bank account so if they get in a fender bender in a supermarket they can pay $1,000 out of pocket to not file a claim with their insurance company. Its simply not a competitive market in the lower quadrant of say the lower 25% of income earners in the country.

Mr. Birnbaum stated that he would like to tie into the climate change analogy. If you look at what regulators are doing with climate change they are really focusing a lot on company disclosures and asking companies to make climate risk disclosures and those disclosures are public the idea being that by forcing companies to think and act on those issues and then make them public investors and members of the public can evaluate how companies are dealing with the issues. I think that's a really good analogy for how to deal with some of the issues of systemic racism in insurance. Asm. Cooley stated that from a CA perspective there are a lot of companies that are trying to brand themselves in that area and not at the end of a gov't order. Admittedly, someone is not going to be there if they don't think they can make money but if they find a way to do something which takes innovation maybe it does open a path.

Sen. Breslin stated that's a win-win-win if they participate and there should be for the insurer some reward other than profit. At the end of the day there should be some other gov't reward if they are required to turn over their data.

Mr. Young stated that in Buckle's view data is a public good. Our data is really owned by our members. We use our data to go and advocate for our members and get them the best price of insurance in the reinsurance markets. The Buckle insurance model is really built upon the thesis that what drivers need, the bottom third of the socioeconomic specter, is an advocate that can take their data, run market force processes into the capital markets themselves and then basically be that honest broker between the real risk taker which is not the insurance industry. The real risk taker needs to be the reinsurance industry. I've restructured over $30 billion of debt across automotive, financial services, telecommunications, and other industries and my observation of the insurance industry is that we are at the beginning of the restructuring cycle of the insurance industry.

You see the major insurers like State Farm and Geico are not that different from the major banks pre 2008 which were struggling to make underwriting profit and investment returns in order to support large books of business that my not be sustainable in the current model. The

key to this is to figure out how do we get the insurance industry out of insurance the same way that the banks realized they had to get out of writing loans and figure how to create the systems and move the risk out to the markets and change the financial interests and incentives across the entire value chain. Buckle has learned that is the only way to solve the problem for the gig economy and get around the issue of credit score and other factors. To the question of if there is a global warming phenomenon happening in insurance, I would say yes. What you are going to see in the next few years are huge write downs on surplus capital as a result of bad bets on commercial real estate, fixed income instruments, and underwriting. I think if you were to talk to any of the senior executives across the major insurers that they would not publicly acknowledge it but they would probably agree that is the case.

Asm. Cooley asked if any other panelists had any thoughts. Ms. Bahna-Nolan stated that from a life perspective the industry is working very hard to try and find ways to gain access and get to the under and uninsured marketplace. There is a huge gap and huge needs and purpose that life insurance serves. It has been a struggle to try and access that. There are carriers that are making good attempts. Removing some of those barriers and the cost of life insurance and getting that down to something that is reasonable and getting at the barriers to make it easier for individuals to apply and qualify for the insurance is very much front and center. I cant speak for every carrier but can for many in terms of those focus areas.

Asm. Cooley then stated that these are very difficult conversations and he is a lawmaker and believes in the power of gov't to protect people and prod them. At the same time we are talking about how do we change us from where we are to something different. There is no better statement about the process of innovation that I would relate to this conversation than what Thomas Edison said: "There can be no progress until a sufficient umber of people become dissatisfied with the way things are and this can only happen when they are brought to think beyond the limits to which they are accustomed." I see this conversation showing how do you get in the head of the founder of Statefarm that he could approach he insurance marketplace with a template that defied how people thought it had to work and soon had the biggest insurance company in the nation although it had to fight lawyers all the way. I think there is room for prescriptive activity but I also think you need to be thinking beyond the ways of which are accustomed. I think the conversation today and the statements made by Rep. Jordan expressed carefully we have to think beyond those limits and that is very important.

Mr. Mosley stated that as we have discussions like this, variables like credit based insurance scores, education and occupation oftentimes get a lot of the discussion but one of the things that has continued to occur in the insurance industry is the idea of innovation or companies continually trying to improve upon their approach to risk based pricing. Companies didn't find credit based insurance scores put them in and then stop. There has been a continuing push for companies to continue to try and find ways to differentiate themselves and better approach matching premiums to cost and the result of that has been a lot of additional elements and improvement that may not be on the scale of credit based insurance scores but there have been a lot of additional things that have come into play which get at trying to continuing to improve matching price to risk. There may be continuing trouble spots but we need to think about how to better address the issue and not just settle on the status quo. So even beyond those variables that get a lot of attention there is a lot of work in companies going on because if they are successful in doing that it helps them achieve their goals.

Ms. Andrews stated that when we talk about collecting data like race we also have to consider what kinds of abuses can occur as a result of that type of data collection – how is it going to be handled and who is going to be handling it to make sure it's not abused. When it comes to

models, building a model is not a perfect science. Two companies can build a model using the exact same variables but if the underlying data is different you can get very different results so its very important when talking about results of models that we understand what the shortcomings of the underlying data is and we're not just making generalizations about one company's models and then applying it across the spectrum.

Mr. Cotto stated that we are all for innovation but the way you do that is not to prohibit things that are accurate predictors. When you prohibit things you risk undermining solvency and you start to raise rates for everybody. Carriers keep getting better and better because they are competitive and want policyholders. Sen. Breslin stated that carriers want more information and it has become more incumbent to make sure the information is protected and used properly. Mr. Cotto agreed.

Sen. Breslin thanked everyone for all of the information today which will give the Committee a great deal to work with to come up with a finished product. Thank you to all of the legislators that participated as well and I look forward to working with everything going forward.

ADJOURNMENT

Upon a Motion made by Rep. Keiser and seconded by Asm. Cooley, the Committee adjourned at 5:00 p.m.