

NATIONAL COUNCIL OF INSURANCE LEGISLATORS
SPECIAL COMMITTEE ON RACE IN INSURANCE UNDERWRITING
INTERIM COMMITTEE MEETING
JUNE 18, 2021
DRAFT MINUTES

The National Council of Insurance Legislators (NCOIL) Special Committee on Race in Insurance Underwriting held an interim meeting via Zoom on Friday, June 18, 2021 at 1:00 P.M. (EST)

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

Other members of the Committee present were:

Rep. Matt Lehman (IN)	Asm. Kevin Cahill (NY)
Rep. Joe Fischer (KY)	Asw. Pam Hunter (NY)
Rep. Edmond Jordan (LA)	Sen. Bob Hackett (OH)

Other legislators present were:

Sen. Michael Fagg (KS)	Rep. Rachel Roberts (KY)
Rep. Jim Gooch (KY)	Rep. Hillman Frazier (MS)

Also in attendance were:

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

INTRODUCTORY REMARKS: CHAIR BRESLIN AND INDIANA REPRESENTATIVE MATT LEHMAN – NCOIL PRESIDENT

Sen. Breslin thanked everyone for joining even as today is the recognition of a new federal holiday – the first new federal holiday in about 40 years. With that, Sen Breslin turned it over to NCOIL President, Rep. Matt Lehman (IN).

Rep. Lehman thanked Sen. Breslin and thanked everyone for participating today. Rep. Lehman stated that he would first like to echo what Sen. Breslin stated regarding the importance of Juneteenth. Rep. Lehman stated that as a Civil War enthusiast, it's always beneficial to have a sense of history in our minds no matter what issue we, as legislators, are discussing. Next, I would like to say thank you to everyone who has been involved with the Committee's work thus far. Today is the fourth meeting of the Committee and we have thus far heard over ten hours of testimony. I am very pleased with not only the substance that has been put forth, but also the level of diversity and respectfulness in the presentations and views that have been offered.

Lastly, it's important to reiterate that NCOIL is an organization charged with upholding the state-based system of insurance regulation. Accordingly, having conversations like these is not always easy, but it's critical that NCOIL be active and productive as these are issues that can have a huge impact on our various constituents. As we meet here today, it is important to remember that the state-based system of insurance regulation is

under threat at its very core by an effort in Congress to federalize the underwriting of auto insurance. It is we state legislators that have been vested with the authority to make such decisions pursuant to the McCarran-Ferguson Act enacted 75 years ago. I look forward to the discussions today and I'll now turn it back over to you, Mr. Chairman.

Sen. Breslin stated that we had a very good discussion in furtherance of the Committee's second charge, discussing certain rating factors that are used in underwriting, at our last meeting in April where we heard from several speakers with very different views. The purpose of this meeting is to continue that discussion and gather more information for the record in an effort to determine whether unfair discrimination exists in the specific rating factors of zip code, education, and occupation, both as separate factors and in combination. We do have evidence in the record on the use of "education & occupation" but that testimony seemed to reflect their use as a single, joint factor.

As I and others have referenced previously, conversations surrounding rating factors must start with stating what the law is; and that is, as a general matter, that disparate impact has always been legal within the insurance industry but sometimes where there is overwhelming evidence that disparate impact amounts to unfair discrimination because of, for example, a rating factor's negative impact on a protected class, state legislators decide that even if certain factors can be actuarially justified, social considerations warrant that they be exempted from the core standard of risk-based pricing. Thus, the evaluation is a two-step process: first does a factor meet the requirement of being actuarially justified; and, second if yes, then does it nonetheless rise to the level of unfair discrimination? That is the key question we all have to answer. This is what happens across the country in state legislatures when deciding whether or not to prohibit insurers from using certain rating factors in underwriting and that is what we are doing today. That brings us to the format of today's meeting, we'll first hear from our panel of speakers. Once they are finished, we'll hear any comments or questions from Committee members; then from other legislators; and then from interested persons.

DISCUSSION ON THE USE OF ZIP CODE, EDUCATION, AND OCCUPATION AS RATING FACTORS, BOTH AS SEPARATE FACTORS AND IN COMBINATION, IN INSURANCE UNDERWRITING

Doug Heller, Insurance Expert at the Consumer Federation of America (CFA) stated that I'm going to separate my discussion into two parts. First, I'm going to talk about education and occupation, separately but as one part of it and why those have absolutely no place in pricing or underwriting. Then I'll talk about the use of geography in rating which as you know is rife with problems and burdened with the legacy of redlining in significant ways but can also be considered in a somewhat different lens because while there is absolutely no causal relationship between your educational attainment or your job title with your driving, with geography there are arguably causal connections to driving and driving risk that are worthy of a different discussion. But first I need to start by noting that at CFA we see the whole set of non-driving socioeconomic factors linked together as a broader matter of public policy concern so while some companies place emphasis on education and/or occupation others do not but they may heavily weigh credit history or homeownership or marital status. So while we should address the factors on today's agenda I think it's important to keep in mind that tackling them will not alone remedy the problem of racial, ethnic and economic disparities in auto insurance

pricing. So with that caveat noted ill start with pricing tied to motorist educational attainment.

Insurance companies that include this rating factor, and there are several of them the major companies that do, will charge higher rates if you have less education and reduce your rates if you have more. If you went straight to work right out of high school, when you are 40 years old you'll still be paying more than your schoolmate who went to college even if you had the same driving records. When consumer reports (CR) magazine did a secret shopper test earlier this year it found that lesser educated safe drivers pay, depending upon the company and state, as much as 6% and as much as 50% higher premium than equivalent drivers with college degrees. So at this point its important to note for the purpose of our conversation today for deep seeded historical and structural reasons Americans with less education are disproportionately black, brown and indigenous. So while the use of education level penalizes the 59% of white bachelors who never got a bachelor's degree, it punishes 72% of prospective African American customers and 79% of Latinos.

Now the story of the use of employment status and job title is pretty similar with several but not all name brand insures using a driver's occupation for rating their auto insurance policy. Drivers who are in blue collar jobs and lower skilled jobs and the service sector as well as the unemployed will be quoted at a higher premium than drivers who are in every way the same except for the color of their collar. As an example again from the CR research in one city a drive with a clean record was charged \$1,177 if they were a company VP. But they were charged \$1,274 if they were a store manage of that company and they were charged \$1,685 for the exact same coverage if they were a cashier for the company. What we find thematically from company to company is consistent – if you are working class you are going to pay more than a white collar professional for those companies that use this factor.

So, surgeons gets discounts while nurses at the same hospitals pay surcharges. Architects get lower rates, daycare workers high rates. Investment bankers pay less, bank tellers pay more even when they all have the same driving record. So its worth noting again that all these rating factors are cumulative so since people who get surcharged because they have lower skilled jobs are also more likely to have less education and going into some of the other factors more likely to be home renters than owners so the premium surcharges accumulate among precisely the Americans least likely to afford coverage in the first place and lets also recognize the social implications of using job as a factor. Black and Latinx Americans are about 50% more likely than white Americans to be in service sector jobs and pay higher premiums; 23-43% are less likely to be in management and professional positions so again they'll pay higher rates as a result; and of course unemployment for black, Latinx and indigenous Americans is about 50-75% higher than whites.

So whatever arguments insures may use to suggest that bankers, lawyers and software engineers should get better deals than factory workers, cashiers and janitors we simply cannot ignore that this pricing technique as with the use of education has outcomes that disproportionately harm people of color. Now I'm sure that the insurance industry panelists will remind us that they never ask for a customer's race or ethnicity when setting premiums. But we cant ignore how their pricing shakes es out with respect to race and ethnicity. The point of course about justice is that outcomes matter. So now I would like to set occupation and education aside for a moment and move to geography

as its used in pricing auto insurance because I see it through a somewhat different light than strictly socioeconomic status factors.

So obviously zip code is associated with financial and social status in profound ways that cannot be ignored when looking at insurance through the lens of racial equity. But unlike the non sequitur relationship between your job title and your pricing it is not unreasonable to assert that different driving environments create different exposure risks. Driving in a city center leads to more fender benders while driving on the open roads in more rural areas results in fewer but more severe accidents. So because geographic region can account for some of the cost of risk transfer I'm not here to propose eradicating all geographic distinctions in rating. I think you could reasonably decide to spread the risk across all customers within a state but I'm not saying its necessary to achieve justice.

Instead, what I want to offer is the way in which insurers have historically used zip codes to carve up geographic risk looks a lot like the racial redlining that was used generations ago. We have tested at CFA rates as a function of the demographics of a zip code and it is crystal clear that even when accounting for rural and urban differences, communities with higher proportions of people of color face higher auto insurance premiums across the country than those in predominantly white zip codes. If you overlay current auto insurance premiums onto the old redlining maps from the 1930s it becomes painfully obvious that the dynamics and impacts of racialized house rules persist in the insurance sector. One reason for this is that zip codes were created for postal service objectives but they are totally arbitrary from an insurance risk perspective. However, zip codes are freighted with this very non-arbitrary social history that interacts directly with the racial, ethnic and income composition of communities.

In the insurance pricing context this becomes particularly evident along those borders in many cities between a predominantly black community and a predominantly white community. I have examples in Buffalo, Atlanta, Baton Rouge, Denver and several other cities where you can look at these type of zip code boundaries so for the drivers in communities of color the premium is 20%, 50%, sometimes 100% higher than the whiter zip code that is literally across the street. We also end up with these results in part because zip codes are just small, geographic units and most people don't drive in just the zip code they live as they drive in regions beyond that so while its ok to use geographic rating as a way to reflect differences based upon the type of driving environment in which one drives, we should not give it so much weight and not use territories that are so small that we end up with this sort of redlining redux.

There are a couple of ways to address this. One is that you can simply require insurers to divide states into much larger regions that are more reflective of overall regional driving risk rather than the arbitrary postal demarcations. By bringing everyone in the region and pooling the risk, in a larger way you can begin to overcome the kind of redlining legacy that we see in the premiums today. Connecticut takes a different but also viable approach that I think is worth noting and still allows smaller territories. There, the geographic rating factor is a combination of the local territory and the statewide costs which have to account for 25% of the total impact. If I am writing the bill I would give the statewide part more weight but either way in this approach you moderate the impact of local zip code by basing the premiums partially on the rate needed for the state as a whole.

On the other hand, when Michigan adopted a law change in 2019 that ordered companies to stop using zip code things got worse because the law didn't require a broader risk spreading than zip code allows. Instead, several insurers actually changed their rating model to use a much smaller territorial unit called census tract block groups. This played out brutally in one Detroit zip code that I studied. As a whole the zip code is quite diverse but when you look at it by block groups there is one neighborhood that is majority white and another that is 100% African American and now using block groups instead of zip codes as a territory one insurer charges almost double to drivers in the all black census tract compared to the other whiter tract of the exact same zip code. The point here is that using geography as a rating tool may have some meaningful connection to risk of loss but we should be using an expanded geographic footprint for setting the premium in order to overcome historical inequities.

To conclude with a final overarching point – because auto insurance is required by the laws in most states you have a special obligation to develop public policy that improves affordability and prevents inequities in the market. Allowing insurance companies to penalize people with good driving records because they have non preferred job titles or lower levels of education is fundamentally disconnected from the public policy goal of having drivers maintain financial responsibility. Similarly, the use of small, arbitrary geographic segments reinforces and perpetuates the structural racism in our society and while there is room for some geography in pricing the law must do a better job in spreading the risk into larger more diverse regions rather than allowing territorial rating to cement racial inequities in auto insurance markets.

Roosevelt Mosley, FCAS, MAAA, CSPA, Principal and Consulting Actuary at Pinnacle Actuarial Resources, Inc. stated that he appreciates the opportunity to share a few thoughts on the idea of zip code rating and a little bit on education and occupation. Just to provide a quick brief overview I want to backup and provide some background on a little bit of the actuarial perspective on how actuaries approach the use of rating factors and that will apply to the discussion on rating by the use of zip code and education and occupation. I will then talk a little bit about geography rating related to zip code and will touch a bit on the idea of the use of census block groups. I will briefly touch upon a couple of points on education and occupation and then in the interest of time I know that one of the other speakers will delve into that more deeply so I will not cover that in depth. I will then come back to try and tie it all up with some closing thoughts.

First, from an actuarial perspective just to give you a bit of brief background and this is probably not new to any of those on the call but in terms of the use of rating factors the primary reasons that companies use risk factors like education, occupation, zip code and other is really to better match the premiums they are charging to the expected loss and expected risk they are covering. And there are a number of things from an actuarial perspective that governs the use of risk factors. First is we have ratemaking principles that are promulgated by the Casualty Actuarial Society (CAS) that discuss and govern how actuaries are to incorporate information and justification into the use of rate and the development of rates and then Actuarial Standard of Practice (ASOP) 12 which is an actuarial standard on risk classification. Between the two of those standards they really govern how actuaries tend to approach this issue. I won't go into them in detail but will provide some quick points.

First, from the principles on ratemaking, rates are essentially estimates of expected future costs. Insurance companies are in the business of covering risk and in order to

ensure that they are going to be viable they have to develop rates that estimate that future cost and really to enhance the likelihood of the viability of the entire insurance system those overall costs aren't just the costs that need to be focused on but also the cost associated with the individual risk transfer and that essentially gets to the point of charging a rate that is commensurate with the risk. ASOP 12 requires actuaries to select or consider risk that are related to the expected outcomes and the expected outcomes are essentially related to the likelihood of an accident occurring and the cost of covering the claims associated with that accident when it does occur. All risk factors including zip code, education and occupation are covered under these standards.

Mr. Heller alluded to the reasoning behind the use of geographic rating territories and will provide a little bit of additional background. There are variants as to how certain companies incorporate territories into rating. Some companies use zip code as a base, some use census block groups as a base, some companies use broader territories like counties as a base and some companies use some combination of a number of different building blocks so it isn't just that one company uses a particular building block and often times companies don't just individually focus on specific zip codes primarily because most companies don't have adequate experience or exposure to be able to rate individual zip codes or individual census block groups with full credibility so generally what tends to happen is that those zip codes get grouped into larger groups that again can resemble areas that are county based or larger depending on the area and those groups essentially provide the basis for rating. So the reason I bring that up and I would like to share one quick slide because it helps to demonstrate the point – the slide has to do with an example of traffic density and how it varies from state to state.

This is an example of Missouri and its data that is collected by a third party vendor called TomTom. What you can see is that this data is actually captured by census block group and it shows the differences in traffic density across MO and you can see no surprise as you look at the cities of Kansas City and St. Louis you see much more traffic density as compared to areas that are more rural and thus the increased traffic density does lead to increased risk of loss. I bring this up because you can see here as you look at specific areas, individual census block groups actually if you look within areas around them you can see patterns begin to form and what companies tend to do is look at patterns not just of the individual census block groups but of areas around it so it allows them to build up into broader territories but still focus on the geographic risk within the individual areas.

What I would advocate is actually the reverse – allowing companies to build from smaller building blocks that help build up into larger building blocks that actually help them to better reflect the risk and ultimately when you smooth a lot of this out and essentially a lot of this happens when you look at territorial rating what you see is broader groups as Mr. Heller alluded to earlier. Related to education, occupation and geography and the combination of those rating factors is that we have been involved in looking at a number of different companies from a lot of different perspectives and looking at companies that use education and/or occupation – most companies use territory- we were not able to find a company that uses all three of those elements in combination and we were not able to identify a company that has different territory factors by education or different territory factors by occupation level – they all are used as separate individual factors for the companies that are using them and by that I mean that education and occupation are used distinctly and separately from zip code.

In conclusion I will come back to the broader point and say we remain in full support of NCOIL and the work its doing to address the issue of systemic bias in rating but we believe that should be done on a holistic basis – addressing one or even two or three rating factors is not going to identify the issue, it's not going to necessarily solve the issue and in some cases it may not even bring us closer to a resolution of the issue so we wholeheartedly support the effort but strongly encourage the Committee to look at this in a more holistic basis and not an individual rating factor basis.

Tony Cotto, Director of Auto and Underwriting Policy at the National Association of Mutual Insurance Companies (NAMIC) stated that NAMIC firmly believes that the elimination of racism improves every aspect of our relationships, institutions and business communities and that treating all policyholders with dignity and fairness is essential to the continued success of our industry. When we talk about fairness in insurance we're talking about the effort to match rate to risk based on economic, insurance and actuarial principles because not all risks are the same and neither are all rates. I say this not to be cute with a truism or to insult the Committee's intelligence but to emphasize what we're really talking about – when we're talking about fair underwriting factors, we're talking about the principles of risk based pricing – matching rate to risk as accurately as possible based on expected losses. As the Committee continues its consideration of underwriting factors today and into the future I encourage to bear in mind that no single factor accurately measures the totality of risk represented by any individual consumer and that restrictions on rating factors and rate differentials undermines accuracy, forces less risky consumers to subsidize riskier consumers and can cause market distortions that can affect affordability and availability of coverage for your constituents.

In sharp contrast, the use of more actuarially sound rating factors makes unfair discrimination less likely. More factors promote more accurate predictions of future risk, more competition, and increase consumer choice. More, not fewer factors help create fairness in pricing. For purposes of today's discussion, I've been asked to focus on the three rating factors in the meeting announcement, zip code, education and occupation. I will address these in reverse order given Mr. Mosley's excellent commentary around the territory issue and then I will briefly respond to a couple of comments made earlier. At the outset I want to address a concern you may have heard about the dangers of inaccurate or bad data purchased from third parties. For the factors we are talking about this afternoon this information is collected directly from the applicant seeking coverage so the risk of inaccurate reporting is minimized. I also want to include a brief note about a debate this committee has already heard much of regarding causation versus correlation. While the idea of causal factors is intuitive and its very appealing it is imperative to understand causation is simply not a meaningful or workable concept for insurance companies, regulators or legislators. There are no factors proven to have pure causal relationships to losses – no factor could survive such a requirement. The current state of actuarial science is appropriately focused on correlation to the likelihood of a loss.

Earlier I half-jokingly shared with you the platitude that not all risks are the same - well here's another one – not all jobs are the same. They do not all carry the same risks nor do they attract the same talent pools across companies or across entire industries. For instance, in professional liability insurance rates are different for surgeons than for general practitioners, for nurses and for anesthesiologists. Doctors' professional liability rates differ from those of lawyers and accountants. Workers' compensation, life and

health and disability rates all differ greatly based on the type of work performed at various businesses. To keep picking on attorneys, and I can do that as I used to be one, it's safe to say that there is a much greater danger of a papercut for us than an industrial accident at any given moment in time. Pretending this is not the cause would yield truly bizarre results.

The high-level relationship between occupation and risk also manifests itself in other lines like private passenger auto. Sometimes in easily understood ways like travel patterns, locations and frequency, sometimes in less obvious ways things contribute to loss probability such as things like stress level, attention to detail, responsibility for the safety or wellbeing of others, tendencies to be distracted such as with doctors and pagers, sleep deprivation and even the frequency of substance or alcohol abuse within an occupation. All of these things matter. Two final considerations when discussing occupation are understanding who benefits and the availability of very popular discounts. As I alluded to some professions are shown to have lower likelihoods of experience and losses including many critical public servants like firefighters, teachers, nurses, airline pilots and members of the military. A prohibition on the use of occupation would hamper insurer's ability to reward these consumers for their lower risk profiles while also limiting the capacity of the affinity groups and organizations of which some of these people belong to negotiate even more discounts for representing statistically less risky populations.

Staying on the idea of discounts, I will move into the discussion of education. The same type of occupation based affinity groups I just mentioned also exist around things like alumni groups looking to provide value to their members. The good student discount is one that has successfully permeated popular culture and is beloved by hundreds of thousands of parents of teenagers. These discounts are approved by regulators as actuarially sound and they reflect choices made by a student that speak to that student's level of responsibility and maturity. With respect to educational attainment in the rearview mirror, historical data shows that drivers with higher level of educational attainment shows that they are less likely to experience losses because they are less likely to participate in high risk behaviors – things like drinking and driving or disobeying laws. On a large demographic basis, the American Academy of Actuaries (AAA) and extensive studies by multiple regulators in places like FL, NJ and most recently MD just two years ago have all confirmed that there is actuarial support that these rating criteria represent fair discrimination between risks – the crux of underwriting. The most recent MD report even went out of its way to point out that the department could not identify a single consumer complaint around the use of education or occupation as a rating factor.

Not all companies use education and occupation and they certainly don't use them the same way. This is actually a perfect illustration that a healthy competitive market is allowing for independent decisions by industry competitors where underwriting and rating methodology is concerned. I'll touch briefly on zip code as well as Mr. Mosley alluded to – geography is an incredibly important consideration in pricing. Again, using auto as an example, reams of historical data indicates that the reality is that crashes, vandalism and theft are more common in urban centers, most likely due to the population of traffic density, road configurations and the absence of garages. Suburban Louisville, where I live, is not NYC and if I drive about 20 minutes east I'll be in a zip code that's home to more horses than people. The risk profiles of these areas are simply different. Similarly, the risks of storms, floods and other natural disasters vary across geographic areas within a state or even within a metropolitan area and that must

be reflected in the way in which insurance policies are underwritten and rated, all of which are approved by regulators at some point along the way.

I want to take a moment to address the comments regarding the CR study on education and occupation. CR actually admits in that study themselves that they do not intend it to be a nationally representative analysis. They studied 869 preliminary quotes in 21 zip codes which is certainly not representative and the study actually admits as a direct quote “the CR team did not attempt to identify or understand all of the variables that affect quote premiums.” So there are clearly significant concerns with citing a study like that. Furthermore, what the study actually found contrary to the splashy headlines was that in several cases the individual with the higher or better title actually paid more so to represent education and occupation because of one CR study on quotes which never went into an actual final price should not bear any weight before this Committee.

I also want to address the issue of socioeconomic variables and direct the committee’s attention to a recent study that NAMIC commissioned by Dr. Robert Klein who took a look in depth at the data provided by the NAIC in their auto study WG that took 8 years to crunch some data around auto. Dr. Klein looked at the socioeconomics of income and geography and did some comparisons and found that if anything lower income areas receive more benefits in relation to the premiums that they pay when you look at insureds. As this committee continues its important work, a few final thoughts. Factor interaction is neither monolithic nor static just as policyholders are not static. As consumers can change jobs and attain more education their risk profile constantly changes and at the same time actuarial formulas are constantly being recalculated and recalibrated and the relative value and weight of different factors, all of which are submitted to regulators, continue to change.

Second, risk based pricing benefits consumers – it reduces cross subsidies and enhances competition and it lowers average costs. Risk based pricing also benefits society at large by allowing insurance to serve as a financial incentive to modify behavior in the name of safety. Third and perhaps most importantly for purposes of this committee, the underwriting analysis of education and occupation and zip code is in no way limited or even informed by race because race does not matter for purposes of analyzing the likelihood of a loss. More factors makes racism less likely and improves the fairness of pricing for all consumers.

Peter Kochenburger, Executive Director, Insurance Law LL.M. Program, Deputy Director, Insurance Law Center, Associate Clinical Professor of Law - University of Connecticut School of Law stated that he will address three factors. One is the concept of fairness. The second is what do these models and factors really mean and how do they likely affect state insurance markets. And third is are there other and better choices besides education and occupation as well as zip code to use. Regarding fairness, I disagree with Mr. Cotto in that actuarial fairness of does the rate and risk classification do what it said is simply one of two very important factors – its never been the sole factor. Fairness is a broader concept and you can find that in many regulatory standards of a two part test. One – does the risk classification measure risk as it says it does – that’s necessary and important but is not sufficient. The second is does it violate public policy and that’s where you all come in as public policymakers and state representatives and we have plenty of examples of that. Lets assume race or religion was actually demonstrated – that there was a correlation between one’s race and risk. We don’t allow that and its not because we are suspect of that math that went into that but

because there are other important aspects of the insurance market in society that trump that.

You can go to another example and one more immediate which is the prohibition in the Affordable Care Act (ACA) in employer based insurance of using pre existing conditions to rate health insurance. Obviously that's one of the most relevant factors in terms of how much ones healthcare is going to cost the next year. We don't allow it not because its not understood or not because its not actuarially predictive but because there are other public policy goals as determined by legislators that override that so to consider fairness as only actuarial fairness is only half the job and would only give you half the role that you are supposed to play that regulators play and that the federal gov't plays in other areas.

Second – what do these factors actually mean in terms of education zip code and occupation. One issue is do they actually increase access or are we working within the same risk pool overall? Unless occupation correlates negatively with risk – the more educated you are the higher risk you are – of course the more education you have the better and I think the CR study that was mentioned is a very good one but it doesn't matter. Regardless, there are more studies over the past 30 or 50 years than there are people on this call that clearly demonstrate that occupation and education and ethnicity and race are clearly correlated and not to the benefit of people of color. That's a sad fact and one that I would hope is getting better but there is no serious argument that education and race correlate – not because that's the intent but that's the effect so to use these factors, again assuming that more education is a better risk factor which I think is an assumption that I have based on these discussions, is that its going to disproportionately burden people of color. Its up to you all to decide whether that disproportionate burden is worthwhile but it's a decision that needs to be made by the public and gov't and not by any private industry.

Second, with this state risk pool we often hear that if you don't allow these factors some people are going to pay more than others and that may be true but the corollary is also true as some people pay more now because of those factors so this shifts who are the winners and losers within the risk pool. There are no arguments that either education or occupation actually increase access for people who otherwise couldn't afford it as we are talking about personal lines issues largely and not about layers and doctors as they can look after themselves better than most. So we are really shifting how much people pay – not reducing overall the cost of the auto insurance pool nor likely increasing access to this pool. What the factors do, along with the hundred of others that are coming in all the time, is allow insurers to better predict and evaluate and market to the best risks – those with less losses. There is nothing wrong with that as that is what private insurers are supposed to do and its part of their function to predict risk and target those who have less risk but its not what the overall insurance market is supposed to do especially the auto insurance market and homeowners and renters which is to provide access to a necessary product whose necessity is well beyond not just the policyholder and insurer but to the state and public as a whole.

I don't doubt for a second that insurers are not attempting to discriminate on the basis of race but as Mr. Heller said earlier that's not the point – it's the outcome that matters and the outcome with factors like education and occupation and others in which we look at there is such a clear correlation in terms of race and a very low likelihood that it actually

increases access so it means that insurers are racing to pick the best and the market exists for all of us who need and can afford insurance.

The third factor that's part of this is that as these classifications pick winners and losers do you want that to be based on education and occupation even if there is a correlation. Because while there is an uncertain correlation between education and occupation and risk there is a very clear correlation between education and occupation and race. So are these factors that you want insurers to use to be able to pick winners and losers because that's not a market decision ultimately, it's your decision.

And then, what are the alternatives if it's not allowed? Well first this is not the end of risk based pricing and I am very glad we didn't hear that argument today as we've heard it here and in other places that simply restricting one or two factors ends the insurance world as we know and that's not the case. There are other better factors that are as far as we are aware that correlate less with race and we also know that there are a growing number of them and they have their own problems perhaps and we've talked about that in the past and there are ways to determine whether they have a negative effect but education and occupation are particularly associated with race so there are other alternatives and this is not the end of risk based pricing as we have telematics and user based insurance (UBI) and this is not a panacea for all problems by any means but instead of using proxies to measure risk which is what any rate risk classification really is, now insurers at least in many states with consumer consent can actually measure the risk itself such as how the person is driving. It is subject to some concerns such as privacy and transparency but it certainly alleviates significantly concerns about disparate impact. Disparate impact of course may be a factor in many areas but with UBI and telematics it reduces it I believe far less so we have better factors and better risk classifications and better abilities to measure actual risk such as additional factors other than education and occupation.

Again to summarize, I think if you look at actuarial principles and ethics that in fact fairness is more broadly defined in terms of public policy although as determined by the public and gov't. Secondly, what these factors do is pick different winners and losers in the same risk pool and there is no concrete evidence that they actually expand insurance or make it overall more affordable. In fact more insurers are collecting less premiums than before because they can more accurately determine risk. Finally, are there better alternatives to using these factors.

Jan Graeber, Senior Actuary at the American Council of Life Insurers (ACLI) stated that she would like to start briefly by level setting what some key considerations are with respect to underwriting life insurance products. First, risk classification is a basic premise of private voluntary insurance and this voluntary insurance market depends on an accurate assessment of risk to enable insureds to make products widely available and at the lowest possible rate to as many people as possible. Underwriting decisions are not based solely on one factor rather insureds take a holistic approach to their underwriting and consider a range of factors that impact mortality and morbidity and by law we must be able to state that any factors used are justified by sound actuarial principles or reasonably anticipated experience and result in individuals with similar risk being treated consistently. Because life insurance, long term care (LTC) and disability insurance are generally long term financial protection products accurate risk assessment is key and can only be done if we have accurate and complete info regarding the risk being assumed.

I will focus today on the use of occupation zip code and education level in underwriting products so I'll look briefly at the use of these factors and how they are used separately and how they are used sometimes in combination with other factors. Starting with occupation, the use of occupation is one factor that has more of an intuitive connection to the risk being assumed so obviously some occupations are more hazardous than others and this could impact an applicant's mortality or morbidity so someone working on an offshore oil rig or in the lumber industry or a professional race car driver they are going to expose insurers to a higher mortality risk than someone who sits inside behind a desk all day. Occupation is also a factor that is used in determining eligibility for and suitability of coverage and also for fraud protection purposes. So for example an underwriter might consider occupation in validating the income amounts that are stated on the application so this will help inform the underwriter as to whether if the desired coverage is reasonable in relation to the financial risk being assumed. So for example a childcare provider or assistant manager at a retail store applying for a \$10 million dollar policy is going to prompt the underwriter to take a deeper dive into the application - it doesn't mean that the coverage won't be issued but causes the underwriter to ask additional questions - why would an individual making \$56,000 a year need a \$10 million policy. It doesn't mean that the policy won't be issued it just means that the underwriter must look at additional factors to help understand why the coverage applied for makes sense in relation to the risk being insured.

The use of zip code is not really used in underwriting or issuing individual policies but there are exceptions which are generally in issuing a corporate or business type setting and not necessarily to use mortality assessment but more to look at the insurer's concentration of risk - how much risk is the insurer exposed to in one particular area so for example a company insuring professional athletes will look at concentration of risk and the potential for a catastrophic event so if a team takes a private jet to a game and the company insures the entire team plus the coaching staff the company could easily be sitting on over \$100 million of risk in the event of a catastrophic event. Another example is that you might have a wealthy family that has a family office and there are multiple members of that family that work in that office they might all be buying individual policies as part of an estate planning strategy and the company might take into consideration of that four to five family members with \$50 million policies the company is sitting on \$250 million of exposure.

A more common example is a company that issued policies in an area with a high propensity for tornadoes - they would want to manage how much risk they have in that area making sure they don't have an overexposure in one particular area due to the possibility for a catastrophic event. Most of the focus on the concentration of risk is on employer sponsored plans as an employer that has 100 employees in a situation even if a company issues \$1 million policies on each employee that's \$100 million of exposure so the coverage doesn't have to be a high face amount and historically no one really thought about concentration of risk with group life insurance but then we had 9/11 and that really changed the way companies look at concentration for risk for group life insurance.

In summary zip code might be used for risk mgmt. but not for risk stratification and even though where you live can impact your mortality as there is a theory that people with lower incomes might have a higher mortality because of where they live as they might have more access to fast food restaurants and less access to gyms or medical care but

as an example you could have a very high income earner living in an affluent area living next to whole foods and has discretionary income and can seek medical care or participate in healthy activities but they might not choose to use their income and might drive 10 miles to fast food restaurants and may never step foot in a gym and on the flip side you could have a person living in a low income area near lots of fast food restaurants and they are vegan and very healthy and at the end of the day its their medical history that's going to show up differently and that's what they will be rated on so just because they live in a poor neighborhood doesn't meant that their health profile is worse than someone who lives in a more affluent neighborhood. So if I apply for two identical policies with the same company it doesn't matter where I live, I can use a different address on each policy I'm going to get the same rate because they are underwriting me and not where I live. Finally zip code is often used in marketing models to identify target markets for the distribution and sales force but not for risk stratification.

Education level is not used very much at all if ever. Carriers don't ask for this information on applications however there is a correlation between education and a lot of things so it could help the underwriter determine if the amount of coverage the applicant is applying for correlates to their needs so whether it be for income replacement or estate preservation. Education often overlaps with occupation so for example a medical resident straight out of medical school might have a low current income compared to the amount of coverage they are applying for and this doesn't meant that the coverage won't be issued but it prompts the underwriter to take a deeper dive and they will look at their occupation which is often an indicator of education level and they will take into account the potential growth of their income so like zip code, education is mostly used in marketing models to identify target markets for the distribution of sales force and not for risk stratification.

In summary accurate assessment of mortality and morbidity risk is key to underwriting life insurance products and this assessment requires sound actuarial principles or reasonably anticipated experience to support any premium or benefit difference among classes of insureds so the clearer picture that insureds have of the risk the applicant exposes them to the more accessible and affordable products will be for everyone.

DISCUSSION REGARDING RATING FACTOR PRESENTATION

Asm. Kevin Cahill (NY), NCOIL Treasurer, thanked all the speakers and stated that this is an important discussion and the real framework was put forth by Prof. Kochenburger in that actuarial information is important but it is not solely important – public policy also counts. One question I have particularly for the last speaker who mentioned the element of fraud – fraud seems to be a great go to for the insurance industry yet when I ask the insurance industry to quantify it and give it a dollar value they are hesitant to do so. I suggested three years go to the P&C industry that if we imposed all of the anti fraud measures that they wished for how much would they lower my insurance by and they wouldn't tell me but at the end of the day the best number we could come up with was something in the 1 or 2 percent range. With this emphasis on avoiding fraud by raising the issue of a low wage earner seeking a high life insurance policy I mean I understand that's odd but so what a lot of things are odd – people collect toys and that's odd. How much of factor is actually fraud in the every day operation of the insurance industry – it seems to be the go to.

Mr. Graber stated that I can't speak to exactly what the impact is on premiums or that kind of thing but it does tie to that intuitive connection of why would a low income worker need a \$10 million policy and that could happen and again it doesn't mean that the low wage worker won't be issued the policy- they may have a trust fund or family money but what it does do is it requires the underwriter to go and look for the additional support whether it be looking at other financial information. Another issue can come up as to whether they can afford the premium if you are a low wage worker so underwriters want to make sure that they have looked at the reason for the coverage and make sure that it makes sense.

Asm. Cahill stated that he would suggest that fraud avoidance is often time used as a reason to do things that might otherwise offend public policy and in fact the inability of most people in the industry to quantify and in particular put it not in the context of what consumers would save on their premiums leads me to wonder if its something that's a gut instinct or something that is scientifically established and has a basis in reality. I do think it's a place where we often hide – we often hide behind fraud to justify actions we might not otherwise be able to justify in other ways or that come into question.

Sen. Bob Hackett (OH) stated that in response to Asm. Cahill's statement, when he was a VP of a big insurance company he spent a couple of months in underwriting and remember in underwriting it's not just fraud it's also you want the facts. So sometimes people don't do it for fraud but people know their health changed and they know their chances of dying is so much greater so there are a lot of reasons why you want to make sure you do complete underwriting. It just makes sense to do that and it doesn't mean they won't issue the policy but it makes sense to address why something would do something out of the ordinary. Sen. Hackett stated that in response to Prof. Kochenburger's statement regarding the ACA, Sen. Hackett stated that he worked partly in the industry and provided benefits so he knew there were issues but one thing people hesitate to say is that if someone had coverage pre-existing conditions did not come into play so the ones that got damaged had actually given up their coverage because maybe it got too expensive to keep and they were trying to chance it and then they developed a health condition after the fact and then they couldn't buy any coverage anywhere because they had a pre-existing condition and had no existing coverage. So the media doesn't always want to show the full picture of the scenario of the thing so I just want to make you aware of the fact that the pre-existing coverage on ACA was important but it was also important because people went without coverage.

Asw. Pam Hunter (NY) stated that she wanted to ask Mr. Mosley a question as during his presentation he spoke about wholly looking at factors instead of just identifying just a few of the risk factors. I'd like him to expand on what that would look like. It also appeared like a lot of the conversation discussed by Mr. Cotto regarded causation and correlation and to me correlation can reach back to discrimination so if someone could make a dive into that and also if Mr. Mosley could expand on the holistic view of factors.

Mr. Mosley stated that in terms of the idea of holistic view the point I'm trying to make is that often times as we have these discussions the focus zeroes in on either single factors or in this case a group of 3 factors and often times the discussion is reduced to the conclusion that if we eliminate this factor then rated will be fair or more affordable or whatever the desired outcome is and I think what we've learned from years of studying this issue and I think this point came out really clearly in the FTC study they did in a 2007 study on credit based insurance scores the real answer is much more nuanced

than if we just eliminate zip code the racial bias will be eliminated or even significantly reduced or if I eliminate credit based insurance scores then all of a sudden the racial bias issue will be solved. It really involves I think a more holistic look at the final outcomes and look ultimately at premiums that are coming out and researching and determining what's the definition of unfair and problematic and then testing the outcomes against that definition. In terms of the holistic look I am essentially recommending looking at this as a holistic issue rather than assuming that looking at these certain factors will help solve the problem.

Mr. Cotto stated that I will address the correlation vs causation issue and whether correlation ties back into discrimination. The answer is yes but the question is what kind of discrimination you are talking about. When you talk about fair discrimination we're talking about discriminating among risks – that's what this is about. Its about discriminating among risks that are more or less likely to result in a loss and there is no incentive for insurers to engage in unfair discrimination. It's a bad business decision based on erroneous biases that would hurt insurers financially and undermine its business objective so.

Mr. Heller stated that I would like to respond to both of those points. With regard to Mr. Mosley's point, I generally agree with that overarching assessment that this is a balloon and if you push on one part of it the air is just going to move to another part of it so we really do need to take a holistic look and there are ways to do it and we do this in other lines of business and in fact at the NAIC in talking about the impact of race in underwriting on the health side there was a discussion of actually collecting data on customers race and trying to unpack whether or not there were disparate impact and addressing that so there can be a larger way and I think we should think about a holistic approach that says are we seeing outcomes that we don't agree with as a matter of public policy and then how do we address that overall rather than one by one.

I want to take a little issue with the point that it's not going to do anything because CA does have some restrictions on the way zip code can be used and on how certain factors can be used and I have tested the CA results by demographics compared to other sates and we do get better results in CA than in other states. Its not perfect and it hasn't solved the problem as Mr. Mosley rightly points out but we do make some progress so I don't want to dissuade you from working on these problems but there is definitely a whack a mole problem of if we get rid of education and occupation like you did in NY and quite effectively I think there is the possibility that another rating factor tied to race just pops up maybe doesn't fully replace it but still is there.

Secondly, on the correlation vs caution piece I think its important to note that even when Mr. Cotto was sharing his thoughts on who gets punished and who gets the benefit in the lines he was talking about liability coverage well we understand why there is different liability and a real causal relationship between what a doctor does and a lawyer does and in life insurance we understand that somebody who walks on a high wire is different than someone who sits at a desk there is a causal understanding there. When you talk about auto insurance he said you think about people with lots of high stress levels and sleep patterns and doctors looking at pagers but what we see is despite the fact that doctors are on call every other Saturday night they are getting the best rates but a janitor who works very hard but probably isn't on call the same way is getting the higher rates so whether or not there may be some correlations it doesn't even add up in a causal relationship and the point I think Prof. Kochenburger rightly made is that as a public

policy matter you have the right to overlay your view of the world as to what type of discrimination public policy should be looking at not just the actuarial discrimination that Mr. Cotto is focused on.

Prof. Kochenburger stated that regarding the correlation and causation issue I agree with what Mr. Heller said and several of the NCOL members but I think one issue to look at is what can the consumer or policyholder do about addressing those risks. We can drive better and install better safety devices in our homes factors so risk based pricing that gives us as policyholders and potential policyholders info that allows us to act and address those risks and reduce them is very important. Yes of course we can affect our own education and occupation but many people cant practically do that and no one is going to do that and look at education or occupation that they have to address or change because it will get them better access to insurance so these are not factors along with others that translate into action that benefit the policyholder. The insurer through fewer losses and society overall your major concern because money and resources are always better spent not in paying or mitigation of claims but not having them in the first place. The second point is that I think the ACLI did a very good job of explaining the importance of that this is not all or nothing – there are certainly some places where occupation or income for example could be useful and life insurance underwriting policies is certainly one of them in terms of determining the ability of the consumer to pay. But that is not what they are typically used for outside of life insurance in fact its almost irrelevant in that nature and recognizing a couple of exceptions as to why it should be used doesn't mean that therefore you should allow it in every use.

Mr. Mosley stated that to clarify the point I made earlier, I wasn't making the point about one factor at a time in expectation that companies would adjust although as some factors adjust companies do adjust. The broader point I was making was that if we are not careful there are factors that can be attacked or labeled as problematic and then ultimately when they are removed they don't really get us closer to where we are trying to go or help with the overall situation. The last point to make is that in terms of specifically the auto rating program in CA, that's an example of what I'm trying to describe. Mr. Heller talked about the research he has done that has shown that essentially that the approach taken by CA is less discriminatory but that contrasts to what is in an article published 4 or 5 years ago published by ProPublica which essentially called out 3 or 4 different states for essentially allowing insurance companies to overcharge minority areas. Ultimately there were some issues with that study and it was found that that wasn't exactly a conclusion but CA was one of those states that was called out based on the use of geographic rating for allowing companies to overcharge minorities so based on how those studies are done there isn't even agreement as to whether the CA study helped in the area of discrimination or not.

Rep. Lehman stated that I am hearing the world holistic and my thinking is that we started with credit score then we went to these other factors of zip code and occupation and education – isn't this really a bigger issue of artificial intelligence (AI) coming into the rating factors and coming into the issue of rates. Setting discrimination aside for a second how is all of this going to play out long term and some of this plays out with regard to transparency. As an agent, I have a lot of clients who will ask me what has caused my factors to change and I don't know the answer to that so its not so much what is in those but how transparent it is to the consumer. Moving forward, this isn't the last we are going to have a discussion about factors but I think we are going to move beyond about how they affect race in underwriting and how long term we are seeing a

shift in underwriting from the law of large numbers to the very close predictive modeling so I am curious how AI plays out long term and this is the crux of how it plays out broader. I am curious from the experts where they see this going long term.

Mr. Heller stated that I have very serious concerns about exactly what Rep. Lehman is saying and we have done polling and there has been some academic research done this year about the factors that are used and when asked its not about just knowing that they are used and what factors affect their rates but people very explicitly reject the idea that their education or occupation should be included in their auto insurance pricing so I do think there is an element of public awareness but the people we polled always say rate me on my driving and not who I am.

Along the lines of what Prof. Kochenburger was saying there are signals of if you are a good driver you will get a discount and as AI and machine learning develops things that we cant even parse through it makes it much more difficult for consumers to know why their rates are changing and also what the need to do to improve their rates and that's a very big concern. The other problem I will add which layers on to this particular issue of race and ethnicity is that we have a significant problem with not yet understanding how historic bias and ongoing input bias affects AI so we may actually be spitting out even worse versions than we have now so we have to be careful to try and overlay this view of a holistic approach onto AI otherwise its going to get ahead of us real fast and it may already have so I think your point is important to try and slow down perhaps and unpack what is going into these machine learning tools before we start allowing them to be used in ratemaking.

Rep. Lehman thanked everyone for participating and stated that he feels that of all the meetings he attended and been a part of this meeting came with a lot of data and good info and leads us into a transition into a broader discussion perhaps. Thank you to Sen. Breslin for all of your work and there is another meeting in Boston in July of this Committee to discuss this. I appreciate all of the legislators that have participated and the industry members and others and they did a great job. I hope to see everyone in Boston.

ADJOURNMENT

Hearing no further questions or comments from legislators or interested persons upon a motion made by Asm. Cahill and seconded by Rep. Joe Fischer (KY), NCOIL Secretary, the Committee adjourned at 2:30 p.m.