UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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In the matter of: *
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REACHING ZERO: ACTIONS TO ELIMINATE *
SUBSTANCE-IMPAIRED DRIVING *
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Board Room and Conference Center
National Transportation Safety Board
429 L'Enfant Plaza East, S.W.
Washington, D.C. 20694

Wednesday,
May 16, 2012

The above-entitled matter came on for hearing, pursuant to Notice, at 9:00 a.m.

BEFORE: BOARD OF INQUIRY
National Transportation Safety Board

APPEARANCES:

NTSB Board of Inquiry

DEBORAH A.P. HERSMAN, Chairman
CHRISTOPHER A. HART, Vice Chairman
ROBERT L. SUMWALT, Member
MARK R. ROSEKIND, Ph.D., Member
EARL F. WEENER, Ph.D., Member

NTSB Technical Panel

STEVE BLACKISTONE, J.D., State and Local Government Affairs Liaison
STEPHANIE DAVIS, Transportation Safety Advocate, Safety Advocate Division, Office of Communications
DANIEL FILIATRAULT, Project Manager, Office of Highway Safety
JANA PRICE, Ph.D., Senior Human Performance Investigator, Office of Highway Safety
DANIELLE ROEBER, J.D., Chief, Safety Advocacy Division, Office of Communications
NICHOLAS WORRELL, Transportation Safety Advocate, Safety Advocacy Division, Office of Communications

Panel 6: Prevention

ROBERT SALTZ, Ph.D., Senior Research Scientist, Prevention Research Center
FREDERICK MAHONY, Chief, Massachusetts Alcoholic Beverages Control Commission, National Liquor Law Enforcement Association
ROBERT E. TAYLOR, M.D., Ph.D., FACP, Professor of Pharmacology, Medicine and Psychiatry, Howard University
ABDULLATIF (BUD) ZAOUK, D.Sc., Director, Transportation Solutions, QinetiQ North America

Panel 7: International Perspective

MIRCEA STERIU, Communications Officer, European Transport Safety Council
BARRY WATSON, Ph.D., Director, Centre for Accident Research and Road Safety - Queensland
STEVE MARTIN, Superintendent of Motor Vehicles, British Columbia Ministry of Justice

APPEARANCES (Cont.)

Panel 8: Actions Needed to Reach Zero

R. GIL KERLIKOWSKE, Director, Office of National Drug Control Policy
RALPH S. BLACKMAN, President and CEO, The Century Council
JOHN D. BODNOVICH, Executive Director, American Beverage Licensees
TROY E. COSTALES, Chairman, Governors Highway Safety Association
J.T. GRIFFIN, Senior Vice President of Public Policy, Mothers Against Drunk Driving
JACQUELINE HACKETT, Deputy Director for Policy-Intergovernmental and Public Liaison, National Drug Control Policy
JENNA McMAHON, National Organizations for Youth Safety
JEFFREY P. MICHAEL, Ed.D., Associate Administrator, Research and Program Development, National Highway Traffic Safety Administration
ARLENE J. MULDER, Mayor, Arlington Heights, Illinois Vice Chair, Conference of Mayors' Criminal and Social Justice Standing Committee
JACOB NELSON, MPH, MPP, Director of Traffic Safety Advocacy and Research, American Automobile Assn.
MARY JANE SAUNDERS, J.D., General Counsel, Beer Institute
STEPHEN K. TALPINS, J.D., Vice President, Institute For Behavior and Health
ROBERT VOAS, Ph.D., Senior Research Scientist, Pacific Institute for Research and Evaluation
JAN PAULS, Representative, Kansas House of Representatives

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P R O C E E D I N G S

(9:00 a.m.)

CHAIRMAN HERSMAN: Welcome back for the second day of our Substance-Impaired Driving Forum. Yesterday was a very long day for us, but I think it was a great day and everyone that I've talked to this morning has commented on what wonderful presenters and panelists that we had. And so, I know we're going to be hearing from a number of presenters today as well and so we look forward to another full day of presentations and discussion.

At this point I'm going to turn it over to Mr. Filiatrault who is going to introduce our sixth -- our first panel of the day, which is Panel 6 for the forum.

MR. FILIATRAULT: Thank you, Chairman Hersman. To further discuss intervention opportunities, the sixth panel will explore range of non-judicial approaches that can assist drivers to make safe choices or prevent substance-impaired driving from occurring. Dr. Saltz from the Prevention Research Center will give our first presentation, discussing the rationale, evolution and effectiveness of responsible beverage service for reducing alcohol-impaired driving accidents. Dr. Saltz?

DR. SALTZ: Thank you. I've got the button now. If we can get to the slides? Thank you. I'm going to be talking in the few minutes I have about an approach to prevent alcohol-impaired driving and other alcohol harms that we like to think of as part of a public health model in which you can focus on some

interventions aimed at the individual drinker. You can look at changes in the alcohol itself, alcoholic beverages, but there's an enormous potential in working with the environment, both the specific environment of bars and restaurants or also the broader environment in the media and social norms as well. But today we'll be talking about commercial bars and restaurants that have licenses to sell alcohol for consumption on premise.

And responsible beverage services is an evolving concept. I'm surprised that my text -- let me go back then. So the first one -- the first line reads Early Dram Shop Law. In the early days of this country there were laws that made it illegal to serve someone who was a known drunk. This was to protect the families of such people, and it held dram shop owners -- these were taverns that served alcohol by the dram, which is a measure, the unit of drinks in those days, and it held them accountable if they were to serve someone who was a known drunk.

This evolved into some work done in the last century, mid-century and later, on using the server as a referral agent. Some work, especially by Australians, in a patron care approach would have bartenders and recruit them to be sort of like referral agents to suggest to the drinker they might go seek some treatment. And then from there it wasn't too far of a -- too much of a step to go into server intervention. And this began to get very popular in the '80s, 1980s, and this was the idea of using bar or restaurant staff to keep someone from driving if they

became intoxicated at the premise. So at the very least, one aspect of responsible beverage service is to -- is sort of a harm reduction strategy to reduce the likelihood that that person will drive, and seek -- you know, the idea is to seek alternative transportation or keep them there and have someone else drive them home.

And then, finally, what I would call sort of full comprehensive responsible beverage service takes a step back and says what steps can management and staff take to reduce the likelihood of intoxication in the first place? And then, failing that, or if the patron came already intoxicated, then it would be a matter of server intervention to keep that person from causing harm to themselves or others.

So the different mechanisms that can be used to create that kind of responsible beverage service to change those practices would include typically server training, manager training, a combination of both, or management consultation. The idea is to tell the managers what they needed to do in the way of changing practice and setting policies so that their staff will carry out responsible beverage service practices.

Less often in this area or less often consciously or overtly, the other kinds of things that may improve, you know, serving practices would include liquor liability laws, and I'll touch on that in a few minutes, laws that would increase the penalties for someone who serves a patron who later was involved

in a crash, and there's also enforcing serving laws directly. Most states have laws against serving someone who's intoxicated, who is obviously intoxicated, but the enforcement is very labor intensive and very difficult and so is rarely used.

And then, finally, responsible beverage service has been part of comprehensive community prevention strategies most often found in research products and not so often in the real world.

The rationale for responsible beverage service comes from historical legal precedents of the kind I just referred to, laws that hold the servers responsible in a variety of ways. The reason we're interested in this as an intervention is that the potential impact may be high. In some of the studies that out there, we found reductions as much a 50 percent in the proportion of patrons who are intoxicated, so I think the potential there is very high.

It's very proximal to the danger of harm. This is the place where the drinking actually takes place, and so any intervention we can put right then is -- could be very effective because it takes place at the time of the drinking, and it minimizes reliance on the drinker's own judgment. If you can effectively train staff or use house policies so that the drinker is guided by the staff, you know, up to the point of outright refusal of further service and the arrangement for alternative transportation, then this could be a very effective intervention because it doesn't rely on the drinker to make those decisions.

Let me just cover quickly that there are a number of early efficacy studies. Those just attempt to look to see if the concept has any value or any potential at all, and I have some other slides that I'm not showing today that I'll keep in the set for the docket so that people can review them later, and I'll also provide references for the docket later so if people want to go back to the original studies. But there was a TIFS evaluation done in the mid-80's, 1980's, along with the Navy Server Study I'll describe in a minute, and another study done in Thunder Bay, Ontario, and I'm just going to talk about one of those, the Navy Server Study in which we worked with one Navy enlisted club bar.

We did an extensive manager and server training program primarily because we weren't sure what to include in it, so we included everything we could think of. So it was a 16-hour training spread out over 4 weeks. We had one Navy bar as the intervention site and one as the comparison site, and what we looked at was -- through both interviews and observations we calculated the number of drinks the patrons had and divided by their body weight and the length of time to make an inference about their blood alcohol level.

And in this chart, which you may not be able to see too well possibly because it's a historical document from 1984, we did reduce intoxication among male customers -- well, across the board by half. And that top line there is that among all males there's about a -- over 30 percent of them had been legally intoxicated as

imputed from the data and we dropped that to 15 percent. And then drivers who were already monitoring their drinking, but, likewise, their proportion intoxicated dropped from about 12 percent to 6 percent, and women are at the lower two lines there. So, although the design was not the strongest design by today's standards, it did show a fairly massive impact.

I also wanted to just point to a number of studies that took this up to scale. The study I just referred to was just at, you know, two places, one for comparison, but other studies have gone to larger scales. And one of them is Jim McKnight's NHTSA-funded study in which they went to 100 establishments across 8 cities with a 3-hour training and used 135 comparison sites, so a fairly massive undertaking using the so-called pseudo-patron protocol in which they test the effectiveness of the intervention by sending in people pretending to be intoxicated to see if they could be served. And in that study they found that trained servers were likely to intervene in some way. They went from 27 percent versus 14 percent at the baseline. So they improved some kind of intervention, but mostly it was comments to the drinker that they really should watch their drinking, they shouldn't have another drink, but outright refusals still were very low at 5 percent. This is in the mid '80s.

Another study was the Oregon Server Training Law. Oregon is unique as a state because it has training -- it had a certificate required of all trainees, and they were able to

mandate training for all servers with the result that they had a 23 percent reduction in crashes in Oregon after the law went into effect. This is controlling for a lot of other factors, including other states around -- using other states as comparisons before and after that policy went into effect.

So let me just briefly mention one other major study. The Stockholm Study was a 2-day server training and it achieved -- a refusal to intoxicated patrons increased -- the refusal increased from 5 percent to 47 percent in 2 years, rising to 70 percent in 4 years. And they were mostly interested in assaults and found a 29 percent reduction in assaults and other threats.

Now, I can see I'm not going to have time to go into these other mechanisms that are available for enhancing serving practices, but in the Texas -- in the case of Texas liability law, I'll just talk about that one. They established the law through case law. In other words, it wasn't passed through the state legislature, but rather it was found -- bars were found to be responsible, and those court rulings were heavily publicized.

A 10-year time series analysis found that in the first case it reduced crashes, single vehicle nighttime crashes, by 6½ percent, net of other influences; and in the second case, which came in the same year, resulted in an additional 5.3 percent reduction of these single vehicle nighttime crashes, which is our proxy for drunk driving.

So I'm running out of time, but I will just say -- maybe

zoom ahead to significant -- to these conclusions, that RBS evaluations can significantly reduce alcohol impairment and intoxication, but we don't really know yet how to guarantee that result, what combination of incentives and disincentives will guarantee widespread adoption of responsible beverage service practices.

Training alone doesn't seem to be effective from some of the studies that I've just cited here, but the Oregon case remains sort of an anomaly in that because that was merely training and they achieved a fairly significant reduction in drunk driving.

So I'll leave it there. Thank you very much.

MR. FILIATRAULT: Thank you, Dr. Saltz. We will now hear from Chief Frederick Mahony representing both the Massachusetts Alcoholic Beverages Control Commission and the National Liquor Law Enforcement Association. Chief Mahony will discuss the regulation of establishments' license to sell alcohol and the enforcement of those regulations for reducing alcohol-impaired driving accidents. Chief Mahony?

CHIEF MAHONY: Chairman Hersman, Members of the Board, thank you for the opportunity to be here today.

The National Liquor Law Enforcement Association is comprised of state and municipal law enforcement agencies from about the nation. The Massachusetts Alcoholic Beverage Control Commission is the primary liquor law enforcement agency in Massachusetts to enforce the Liquor Control Act.

In Massachusetts, because of limited resources, which is a problem really throughout the country, we have developed a three-prong approach to our enforcement, the first to be a baseline enforcement of underage compliance checks that are designed to increase the vigilance of bar and liquor stores in checking identification. In 2000 we had approximately a 20 percent failure rate in these, and in 2012 we are currently running a 5 to 7 percent failure rate, so it's something that we find very effective.

Something that is the focus of today and I think is really our primary focus in Massachusetts is targeted data driven enforcement. It is data based and intensive enforcement at bars that are seen as the source of impaired driving arrests. We than have enhanced enforcement, which is a seasonal effort particularly in Massachusetts such as the college communities around the fall when the young people are back to school.

Massachusetts, to give you a very quick foundation, as every state in the country, receives its authority from the Twenty-First Amendment to the Constitution, providing for broad-based state authority to create the structure in which alcohol is transported, sold and regulated. This regulation and enforcement is comprised primarily of public safety issues such as sales to intoxicated and underage persons, but also includes illegal activity with everything from gambling to narcotics.

There are approximately 600 on- and off-premises

licenses in the United States. In 2009 the number of licensed premises to enforcement agents ranged from 65 to, in some states, 2,600, which, clearly, you can see is problematic, but the average is approximately 200 licensed premises per agent.

The process that we go through is, as you can see on the screen. When agents observe liquor law violations they can either file charges against the licensee before an administrative panel or against the server in a criminal court. Administrative penalties can have a tremendous impact on the future conduct of the bar or liquor store and, thus, the safety as well as the quality of life for the community in which it is located.

Substantial fines, penalties held in abeyance, and license conditions tend to make unlawful conduct no longer financially viable for the bar owner, and in some cases that financial viability is really the bottom line of what's going to change the conduct of the bar owner.

I will go quickly through the -- a couple of these slides. The CDC has noted the effectiveness of sobriety checkpoints and multi-component interventions with community mobilization. Particularly, they found effective in reducing youth alcohol -- access to alcohol, which, in turn, hopefully prevents impaired driving among youth.

The CDC concluded there was insufficient evidence to recommend these strategies based on the fact that only two studies have been conducted relative to sale to intoxicated enforcement.

We believe, however, through our experience and supported with some data, that the proactive enforcement of these laws can save lives. We've seen the effect that it has had in Massachusetts and in some states throughout the country, and I'll present a couple of those to you now.

I think that -- to give you an overview, sales to intoxicated persons enforcement is conducted by state alcohol enforcement agencies across the nation with very few examples. There are also varying degrees of this enforcement depending on available resources as well as, quite frankly, public and governmental awareness on its impact on impaired driving.

I will provide you a quick example. In New Mexico, New Mexico changed their liquor control regulations so that in cases where a person leaves a licensed establishment with a BAC of .14 or more, the BAC can be used as presumptive evidence of a service to intoxicated violation. New Mexico has also begun an aggressive campaign towards binge drinking and impaired driving. I think this is -- I'd love to have this statute in Massachusetts. I think it's a great idea.

I would suggest that, while the more advanced analyses are still being conducted, New Mexico has presented some preliminary findings summarized here on the screen, and the more detailed information can be found on the CDC website. We find the results to be very promising for increased attention and resources being directed to enforce sales to intoxicated laws.

I can show that place of last drink data. Well, first let me tell you for those of you that are not aware, place of last drink data is -- it varies, but primarily it is the arresting officer simply asking the intoxicated person where they had their last drink. In Massachusetts we have a statute where the information comes from the courts where when a person is convicted they are asked in the court by the judge or the probation officer, depending on the court, where they had their last drink. That information is then compiled and sent to our agency.

As you can see, 2001 we did not have much activity. Over the course of those years the NLLEA has promoted the collection of place of last drink data as a promising strategy to reduce impaired driving and, as you can see, even though while the collection systems are not as systematic or comprehensive as we would like, we have seen an increase in the number of states collecting at least some form of place of last drink data.

The next area I'm going to focus on will be Massachusetts which, clearly, I would like to suggest has been a very successful program. Each year 2,400 place of last drink reports are filed with our commission. In order to optimize resources and gain maximum impact, we utilize this data to identify bars of the highest number of place of last drink reports and, thus, pose the highest risk to public safety.

We then conduct enforcement operations at these bars. If the bar serves an obviously intoxicated person, the bars are

charged and safe transportation or protective custody is arranged for the intoxicated person.

We then conduct administrative hearings based on our reports -- let's strike that. The commission holds administrative hearings where we present our evidence and we ask for a couple of stipulations on their license. We ask for additional suspension held in abeyance for one to 2 years to act as a deterrent from further activity, and we also ask for mandatory server training to try to pull in the education aspect to the penalty. We also conduct some follow-up investigations to see how the compliance is taking place.

We see the impact with the change in bar operations and police reports to us personally of the impact it had on their roads and highways as well as their communities. However, this enforcement is not as easily quantifiable as, say, a compliance check where you have people out constantly collecting very specific data as to what someone is served. So in Massachusetts, quite frankly, we felt the need that we needed to prove it both to our superiors that this is work worth doing in order to have effective place of last drink or sales to intoxicated enforcement.

Before I change the slide I would -- well, I'll get to this in a minute. In 2007, in order to prove the information that we felt we saw on a daily or weekly basis, we developed our list of 31 worst offenders to be identified as being associated with the highest number of OUI convictions. Twenty-four of these bars

were charged. These bars were located in 22 municipalities in 8 counties throughout Massachusetts.

Our enforcement data, and I do not pretend to be the quality of any type of researcher that are here on the panel with me, I can simply state this is research compiled by enforcement officers within our agency, but the data clearly indicates there was a dramatic, extremely dramatic, reduction in the place of last drink reports coming from the bars that were subject to this enforcement and, more importantly, were charged. The bars that were not charged did not see a reduction in the place of last drink data the following year. We thought this was very promising.

MR. FILIATRAULT: Chief Mahony?

CHIEF MAHONY: Yes, sir.

MR. FILIATRAULT: I wonder if you could just wrap it up now, please.

CHIEF MAHONY: Yes, sir.

MR. FILIATRAULT: Thank you.

CHIEF MAHONY: We've also found that our worse offender list numbers have dropped and that overall we've made some real progress on this.

I'm just going to jump to our recommendations and I will wrap it up simply by stating we feel that these four or five recommendations could have a substantial impact on sales to intoxicated, and by developing our sales-to-intoxicated

enforcement you will see a reduction in impaired driving across the country. Thank you.

MR. FILIATRAULT: Thank you, Chief Mahony. Our next panelist is Dr. Robert Taylor from Howard University. Dr. Taylor will discuss the use of screening, brief intervention and referral to treatment by the medical community; the effectiveness of screening, brief intervention and referral to treatment; and the reasons why Howard University incorporated screening, brief intervention and referral to treatment into it's primary care resident training curriculum. Dr. Taylor.

DR. TAYLOR: Thank you. Howard University Hospital, originally known as Freedmen's Hospital, is a major teaching hospital of Howard University College of Medicine, having a Level I trauma center and having numerous medical residency programs that are accredited by the American Council for Graduate Medical Education. In addition, we train over 500 medical students.

The Howard University Alcohol Research Center was established in 1997, funded primarily by the National Institute on Abuse and Alcoholism. It was founded to stimulate and strengthen and facilitate multi-disciplinary research and collaboration that will lead to the reduction of alcohol morbidity and mortality among minority populations, with emphasis on African-Americans.

Now what is SBIRT? SBIRT is the acronym for Screening, Brief Intervention and Referral to Treatment. The screening involves a screening tool; we use the AUDIT. The brief

intervention is a motivational interview, and a determination of readiness for change and referral to treatment if the individual is positive. This whole process takes some 7 to 10 minutes. It's an evidence-based, comprehensive, integrated public health approach conducted by health and social work providers to screen patients and deliver early intervention and treatment.

Now, there are several projects that were the foundations of the SBIRT program at Howard. In addition to the Alcohol Center, we work with the School of Social Work. We work with area high schools as well to help students understand alcohol. We have a medical education program for medical students as well as participation in an alcohol intervention in an inner-city emergency room project in 2003.

This project involved 16 centers, of which we were one, in which over 7,000 patients presenting to the emergency room were screened using SBIRT. Twenty-six percent were positive, positive for at-risk drinking, and received a brief intervention and controlling for baseline drinking. Patients receiving the intervention had 3.25 fewer drinks per week than controls after the intervention, and we followed these patients for at least 12 months, and the intervention had some resilience at least up until the 6 months.

The intervention was more effective with at-risk drinkers than dependent drinkers, so this modality is more effective with at-risk, that is, moderate drinkers, and the --

among non-dependent drinkers the intervention group was twice a likely as controls to no longer exceed the NIAAA guidelines of four drinks for men per day and three -- two for women.

Now there are a lot of missed opportunities that's been determined in terms of training. Johnson in 2005 indicated that 9 out of 10 physicians failed to diagnose substance abuse in adults. They just don't get the training in medical schooling and residency. Many of them miss it in teenagers, but -- and only a few were prepared to identify dependence on illegal drug and prescription drug abuse.

Why SBIRT? There are many commissions that have come out for this evidence-based modality. The U.S. Preventive Service Task Force, the Joint Commission on Accreditation of Health Care Organizations, and particularly the American College of Surgeons mandates that Level 1 trauma centers have a mechanism to identify problem drinkers and to provide brief intervention.

At Howard we've adopted the acronym RISK: Raise the issue of substance abuse, Inform the patient, Screen for the substance abuse problems, and Know how to offer brief intervention and referral to treatment.

On the docket you can see what our mission is, and that is to provide physicians and other health care providers with the quality education to be able to provide the SBIRT.

Our target specialties are here: family medicine, internal medicine, OB/GYN, psychiatry and general surgery. That

are what we consider primary care specialties. The intervention and training starts with every resident that comes into Howard Hospital gets a lecture on know the RISK. That's a 1-hour lecture about alcohol abuse and substance abuse.

They then do a practice of the 7- to 10-minute intervention with some direction. There's a 2-1/2 hour curriculum online. They then collect five patients that they actually do the intervention. And then they have a clinical skills evaluation in our clinical skills laboratory where the intervention is practiced on a simulated patient with a simulated case and is recorded, and then it's graded. Then there's a booster sometime later.

The preliminary results are promising in the level of experience of our residents working with patients with an alcohol or illicit drug problem. The level of experience is actually higher than we thought, but they are really motivated to do more and, in fact, the readiness to initiate screening and brief intervention in patients increases with the training.

Finally, the summary of our preliminary results is that residents experience change in their attitudes and readiness to train. The training was well accepted and currently we are incorporating patient feedback in the SBIRT visits.

The lessons we've learned is that you need to get buy-in from all parties, from the departments, from the department champions, and there needs to be liaison to assist the SBIRT program in facilitating faculty and resident training.

And emphasizing that these same techniques, motivational interviewing and screening, can be applied to helping patients that address other chronic diseases like hypertension and diabetes. Other resident specialties have asked to be trained. Dentistry all the way through pharmacy and other health care professionals have asked for training, including social workers, genetic counselors.

Now, we're also doing several other things. So the question is what is the effectiveness of this training on impaired driving, and there's very little literature on this, and there are some slides in here that are -- that will be on the docket that show some of the things that we are doing in trying to address impaired driving, but the major articles that have come out are listed here.

One just came out as in-press in the Annals of Emergency Medicine, which basically screened 800 patients at Yale, and they found that emergency practitioner-performed brief intervention can reduce alcohol consumption and episodes of driving after drinking in hazardous and harmful drinkers.

So in their study they reduced the number of drinks in a 7-day period by 50 percent by this intervention. The number of 28-day binge episodes were reduced by 50 percent, and the rates of driving after 3 drinks was reduced over 50 percent in this 12-month follow-up. It was more effective in older adults than it was in younger adults. So this represents the largest study of

this kind that looked at this intervention in regard to hazardous and harmful driving.

Other studies that are in the literature are listed on the slide. Motor vehicle crash patients given brief intervention for alcohol plus a booster had fewer alcohol-related injuries, but there are really limited published findings, mainly abstracts, that talk about brief intervention and this needs to have more research associated with it. Thank you.

MR. FILIATRAULT: Thank you, Dr. Taylor. The next presenter, Dr. Bud Zaouk from QinetiQ North America, will deliver the final presentation on the development of the Driver Alcohol Detection System for Safety programs and it's potential uses.

Dr. Zaouk.

DR. ZAOUK: Thank you. I'm going to talk a little bit about the Driver Alcohol Detection System for Safety and what is -- well, which we refer to as DADSS. What is DADSS? DADSS is a cooperative agreement between the Automotive Coalition for Traffic Safety, which represents the leading automakers in the U.S., and the National Highway Traffic Safety Administration.

This agreement started in February of 2008 and it's a 5-year program. The purpose of the program is to develop and test prototypes that can be considered for vehicle integration that are non-invasive, seamless technologies to measure the blood alcohol or breath alcohol concentration and reduce the incidents of drunk driving.

The primary goal here is to measure alcohol accurately, and I'll emphasize accurately, precisely and reliably, in a very short period -- and we'll talk a little bit about that later on in the presentation -- so that the sober driver is not inconvenienced.

There's a lot of focus on not inconveniencing the sober driver and these devices are intended to prevent impaired drivers that are at or above the legal limit of .08 from driving their vehicles. It supports a market-based approach to prevent drunk driving and the program is split into two phases, where Phase 1 was developing proof-of-principle prototypes, and the Phase 2 is to develop the subsystem and integrate it into a research vehicle. I'll be focusing more on Phase 1 in this presentation.

These are the participating manufacturers under ACTS. As I mentioned, the program was split into a couple of phases, but before we started anything we wanted to assess the current state of technology, see where the technology is today when it comes to alcohol detection in general.

We started with patents and literature reviews, and out of those we developed -- at the same time in parallel we developed a very stringent performance specification that each device had to meet, and in our performance specification we specified reliability, accuracy, precision, as well as a host of other automotive specifications that each technology needs to meet.

Then we went out with a request for information, looking

at who is out there and what kind of technologies do they have, and once we identified these technology developers we then went into an RFP, or Request for Proposals, where we funded three different technologies to move into the Phase 1 or the proof-of-principle prototype. In this phase we did the development of a prototype where we can test in a lab in bench testing, but as well as human subject testing.

And then based on the success of these technology developers they were invited to a Phase 2 funding where we're going to be looking at this point -- and this is ongoing right now, where we're going to be looking at integrating into a research vehicle.

The two technologies that made it to Phase 2 are -- one is made by Autoliv Development, a Tier 1 supplier, an automotive Tier 1 supplier. It's a breath-based system and breath-based systems have extensive real world experience with measured BRAC or breath alcohol concentration. We use alcohol and carbon dioxides and we measure those by an infrared sensor. The carbon dioxide measures the breath dilution. Because of the distance to the sensor you have some dilution in the ethanol or alcohol concentration.

The schematic on the right that you see shows the actual prototype where a sample is drawn into -- it's either pulled in or pushed into what we call an optical cavity. A light, an infrared light, is shined and out of that we are able to calculate the

ethanol concentration or accurately calculate the ethanol concentration.

The idea of implementation, as you see in the image on the bottom left, is -- these are sensors that will be either in the steering wheel or in the header or in multiple locations of the vehicle pulling breath samples as the occupant is breathing.

The second technology that we're looking at is by Takata-Trutouch and it's a touch-based technology, and this technology works by where when a finger is placed on the touch pad interface -- and as we're moving to more and more vehicles using start/stop buttons the integration will be in that kind of area, the black body or the light source shines a light and then that light shines inside the finger and any refraction or reflection of the light is absorbed and measured, and then an interferometer will measure the intensity at each wavelength, and these wavelengths will look for ethanol concentration and we derive this concentration and display it.

So where are Phase 1 requirements? As I mentioned, we have some very stringent requirements that we wanted to accomplish. The first one is to measure from .01 to .12 blood alcohol concentration or breath alcohol concentration. Our measurement time was less than half-a-second, so 325 milliseconds to actually measure the concentration and report back whether you are at or above the concentration. Our accuracy for between .07 and '09 BAC was plus or minus 0.0003 percent BAC, which is

extremely stringent compared to current C.F.R., Code of Federal Regulations, requirements.

This all prompted us and showed that there is a need for us to also develop a calibration device as well as the technology. So we didn't have anything that can measure that accurately, so we had to go into an effort to develop that calibration system which we call standard calibration devices. And for those -- just to emphasize what accuracy and precision is, the schematic on the right, what you see is you have a highly accurate target where you're able to hit the target, so you have very high accuracy but low precision since the dots are around the circle. But on the second -- on the bottom one you see you have very high precision but low accuracy, and we needed to meet both of these, you know, specifications, accuracy and precision, at plus or minus 0.0003 percent. And what I'm highlighting here is again the C.F.R. standard today, and, as you see, we are in order of magnitude more stringent than what's currently out there.

So our standard calibration devices, we had to develop one for breath-based and one for touch-based. In the bottom right corner we had to develop a gas that replicates a human breath. The first part we did was what's called a dry gas which contains only ethanol and nitrogen or alcohol and nitrogen, and we were able to get it to a very high accuracy and precision of plus or minus .5 parts per million, which is equivalent to plus or minus 0.0002 percent BAC.

But that dry gas needed to replicate a human breath, which means you have to have humidity, and for that we developed what we call the mechanical lung, in the main picture on the right, and essentially what that does is it adds humidity to the breath and keeps that accuracy and precision.

And then on the left side we had to develop a standard calibration device for a touch-based system and what you see on the left bottom corner is the solution that optically replicates a human finger, and that's why we introduced a sensor, to be able to calibrate the sensor and verify the accuracy and precision.

We went through a series of tests and -- after we received the prototypes, and there was a lot of good news out of the first phase. Remember the first phase is a prototype evaluation, so we wanted to see how close are we going to be able to get to these stringent requirements. And on the accuracy we were very close. We actually exceeded it in certain cases if you have a longer duration to measure. On the precision, we knew we were challenged and that's part of the next phase, is to work on that and improve it, so -- but compared to current standards we are within on the precision, but well below or much improved on the accuracy side. Same thing on the Autoliv or on the breath-based system, very good on accuracy, but challenged on precision, but also well below current standards.

And obviously all this, we have to verify that it works very well on humans, so we undertook a human subjects study. We

had about 15 participants where we actually draw blood. Well, they're given an alcohol drink. It's called bolus drink, and where they're given an alcoholic drink that they consume within 20 minutes. It gets their blood alcohol concentration to around .12. And then we just continuously measure all the different systems that we have, the breath-based, the touch-based, as well as a handheld device. And we draw blood at the rate of 1 milliliter per minute, and we take a sample every 2-1/2 minutes, so we calculated the actual blood alcohol concentration.

And the two graphs on the right side show you the comparison between all the different devices, and what we're looking for in this first phase is do they match, do these devices work on humans as well as on an SCD, or a standard calibration device. The good news is they do. They work very well and they trend extremely well compared to the blood alcohol concentration. And that concluded our first phase of the study.

So, in summary, on this first phase we had three DADSS Phase 1 proof-of-principle prototypes that completed the human subject testing. The Phase 1 results were very promising. They indicated there's a potential to meet the DADSS performance specifications when it came to measurement time, accuracy and precision. We've identified the research work needed to meet the DADSS specifications, so that's part of our GAP analysis, and we have selected the two technology providers to continue to Phase 2 award, which is Autoliv and Takata-Trutouch. And we currently are

in Phase 2. We just started Phase 2 of the research. Thank you.

MR. FILIATRAULT: Thank you, Dr. Zaouk.

Chairman Hersman, this concludes presentations and the panel is now ready for questions.

CHAIRMAN HERSMAN: I think if you all would like to take 5 minutes for staff questions that would be great.

MR. FILIATRAULT: Thank you. Dr. Saltz, can you talk about how widespread responsible beverage service would be, as a first question, and following with that what would be the incentive for a drinking establishment to implement a responsible beverage service program?

DR. SALTZ: Right. These kinds of incentives and disincentives are set by -- usually by state laws, and the last time I looked there were about a dozen states who mandated server training and about another dozen who gave, you know, some kind of positive incentive for bars and restaurants who would go through the training as well. So, you know, maybe half the states have something in legislation that would encourage RBS.

The issue of incentives and disincentives, as I mentioned, is something we haven't systematically checked out in our research, but it seems clear that if you can have some level of enforcement with the education and training as the backup for that in combination with laws that are clear about liability -- in some states you even have laws that restrict liability so that owners are necessarily feeling responsible for when they serve

patrons. And then finally the insurance liability issue is one that we looked at some years ago and it seemed that a lot could be done in partnership with insurance -- liability insurance companies to bring them into the picture and give incentives to bars and restaurants as well.

MR. FILIATRAULT: Thank you. Just to follow up on that, what would it take for the insurance companies then to develop incentives for drinking establishments to bring about responsible beverage service?

DR. SALTZ: Well, some of them -- a couple of them have, you know, done such things as given a 10 percent reduction, say, for a bar/restaurant that trains their staff. We think much more could be done, but we're not actually sure, you know, how this looks from the insurance business because we were told that their liability rates are not just a simple issue of, you know, calculating whether their place had done the training or not, and they may have to be convinced with further research that they'll see a reduction in claims as a result of training and enforcement, so I'm not sure that anybody has a clear answer on that question.

MR. FILIATRAULT: All right. Thank you. Chief Mahony, does the liquor license enforcement in terms of the alcohol and beverage commissions in each state, do they work closely with responsible beverage service organizations that provide those programs to drinking establishments?

CHIEF MAHONY: I don't believe that we do see a lot of

that right now. I think it's starting to develop. I know there are at least two or three states where they're saying, all right, let's work with these. Some states might not want to go out and choose one responsible trainer or so on to do that, so we don't see a lot of it. I think there is a lot of promise here. I think you could look at licensees that -- or bars and liquor stores that are habitual offenders, or first time offenders for that matter, that could be required to go through training. I think it's a very important step.

MR. FILIATRAULT: Great. Thank you. Dr. Taylor, how would an individual physician, for example, working in an emergency ward, how would that individual physician know that they had an effect on somebody that they did a screening, brief intervention and referral to treatment on, an individual patient?

DR. TAYLOR: Well, the only way they would really know would be to do some kind of follow-up. Often in emergency rooms, you may or may not know that you have your what we call frequent flyers, and so it's sort of a revolving door so you get to know a subset of patients that come in with certain kinds of problems. Especially in the inner city and urban areas, I would say 90 percent of the care is administered in the emergency room, not in individual practitioners' office, and that includes in Washington the Rand study pointed to that very clearly, that providing primary care to the community was sub-optimal and the care was in the emergency room, which is much more expensive.

So what you have to rely on really are these studies where they're systematic. They're followed up. The patients -- unfortunately, a lot of the responses we get in the follow-ups are self-report, but they are incentive for the patients to call back in and give that self-report, and the study is designed to follow up for 6 to 12 months, so this issue of resilience of the treatment is very important.

There is also something called a booster, which means that you give another intervention, say, 30 to 60 days later. Some studies have shown that the booster aids in making the intervention more resilient. Others show that it does not. So, again, an individual physician may or may not know unless there's some sort of follow-up mechanism, and in emergency rooms it's not, but in a primary care surely it could be.

MR. FILIATRAULT: All right. Thanks very much, Dr. Taylor. Chairman Hersman, we're out of time here, so we'll pass on the panel to the Board.

CHAIRMAN HERSMAN: We'll move to Member Weener.

MEMBER WEENER: Thank you. I have a question for Dr. Taylor. You know, yesterday we heard about programs on the judicial side such as DUI courts, and I'm wondering how your program, SBIRT, fits in with programs like we heard yesterday for the DUI courts?

DR. TAYLOR: Most of the DUI courts are probably going to be dealing with individuals that are dependent alcoholic

drinkers. Our program is really primarily designed for people who are at risk and not have reached dependency. The other thing is that the SBIRT is in its infancy in terms of reaching the medical community. It's been pushed very hard by SAMHSA, very hard by NIDA, and by the Office of the National Drug Control Policy as well.

So where we'll end up with this in terms of DUI courts is probably something that we have to look for in the future, but I think most of the individuals are going to be dependent, not at risk, but that's certainly a mechanism by which a recommendation could go out to the DUI courts.

MEMBER WEENER: All right. Thank you. Dr. Zaouk, the DADSS development as you described it is in Phase 1 at this point. Phase 1 is basically approving of the detection system; is that correct?

DR. ZAOUK: Correct. So we completed Phase 1 successfully and we've moved on to Phase 2 at this point. We started Phase 2 a couple of months ago, so we're at the start of Phase 2.

MEMBER WEENER: And Phase 2 is what?

DR. ZAOUK: Integrating the system into a vehicle so that you have -- the outcome is going to be a research vehicle with both systems integrated.

MEMBER WEENER: I presume you've given a lot of thought to how the system can be gamed once it's installed in a vehicle.

DR. ZAOUK: Absolutely. So part of the specification is circumvention and tamper-proof -- circumvention prevention and tamper-proof. Those are critical things that we address in the specification.

MEMBER WEENER: Do you have confidence that you'll be able to raise the system to the kind of integrity that you're going to need?

DR. ZAOUK: Absolutely, yes. It has to meet all the automotive specifications so they can be integrated into a vehicle, so we are -- this is part of Phase 2 right now where we're focusing more on all the different aspects, from reliability to undergoing a series of tests to make sure it can go inside a vehicle and meet all the current requirements.

MEMBER WEENER: But how easy is it to prevent a surrogate from doing the test as opposed to the driver?

DR. ZAOUK: Oh, I'm sorry, I see. Yeah. So no, it's going to be driver focused, so in the breath-based system it is triangulating on the driver only, and in the touch-based system there is a system to make sure that it's only the driver touching the start button in that case, the start/stop button of the vehicle. It's a proprietary method of -- that, unfortunately, I can't disclose because of the development process of it, but it makes sure -- it ensures that the person seated in the driver seat is the one pressing the button.

MEMBER WEENER: Okay. Thank you. Dr. Saltz, it seems

to me that when it comes to intoxication a bar has got an interesting kind of balancing act that it has to have because its revenue depends on selling drinks, but what we're saying here is through responsible beverage service we want to limit the sales -- or limit drinks, but implied, limit sales. How does an establishment go about balancing that?

DR. SALTZ: Yes. First of all, the legal context makes a lot of difference. So if they're motivated to comply with the law because of the fear of fines or even suspension or loss of license that's a tremendous disincentive for continuing to sell to obviously intoxicated patrons. But, second, there are many other ways bars and restaurants make money. If it was only the alcohol, the patrons could just go buy it at a liquor store or grocery store or something, and what their -- so a part of it is allowing -- is showing the bar/restaurant that what they're selling isn't so much just alcohol but the environment in which it's sold and the place as a social location.

I know it sounds a little Pollyannaish, but that's usually how we tend -- in the training or consultation with managers how we tend to get them focused on ways to enhance the experience for their patrons, which includes -- you know, we show them not having intoxicated patrons in their midst, you know, because that usually detracts from the attractiveness of the place.

MEMBER WEENER: Very good. Thank you.

CHAIRMAN HERSMAN: Member Sumwalt?

MEMBER SUMWALT: You fooled me. I thought it was going to go to Member Rosekind, so yeah. Okay, great. Well, I think that what we're trying to do here is we're trying to shift a paradigm and we're trying to drive -- as we say here, we're trying to reach zero, zero deaths due to impaired driving, and the work that the people in this room and a lot of other organizations has done up to this point has been tremendous. We have driven that down significantly, but as we've all pointed out, we have plateaued and we need to be innovative. And so I've been trying to think about this, how can we shift this paradigm, and the thing I keep coming back to -- and, by the way, I'll put you all at ease, I don't think this is a question, but if you have comments to it -- because I'm going to run out of time, if you have comments to what I'm saying please talk to me during the break or submit it to the record.

But what I believe is that we really do need that societal shift. We need to make it understood within society that this behavior is totally, totally unacceptable. And as it was pointed out yesterday, driving while impaired, it's not just a speeding ticket, it's not just a traffic violation, it is a crime that you will -- if you kill somebody you will spend time in prison, and even if you don't kill somebody you're probably going to spend some time in jail anyway and lose your license.

I'm going to say some things that are kind of radical,

but it's all in the spirit of trying to get that societal change that we need, and it really does that take that. You know, let's talk about the victims. I think the Chairman made a point yesterday that somehow there seems to be a difference in the value of a life depending on how that person dies. Now, I don't believe that and I don't think any of us believes that, but I see evidence that somehow there does seem to be this difference in value in the eyes of some.

I read the *USA Today* most days and I noticed that there in the newspaper they list all of the names of the servicemen who have died in the previous day or so in the war in Afghanistan and I want you to know that every one of those lives is precious, and I'm not trying to undermine one life in favor of another, but they make it a point to say that since the war in Afghanistan 1,845 lives have been lost. Well, in that same 10-year period we've lost 150,000 lives due to impaired driving.

And so why is it that the media is choosing to focus on one venue and not the other? And it could be that it's very patriotic to go out and say, well, these people have died fighting for our country, and that's a very, very important and noble cause and I thank them for that, but why is it that we're not listing the names of everybody who's died in the previous day or so in a driving while impaired accident? I know this sounds kind of radical, but why is it they're not doing that, and maybe the newspaper has decided that they want to honor those who fought for

our country, but it could be a political agenda as well, that they want to point out that this war is bad and maybe that's why they're doing that.

So let's point out that in society it is no longer acceptable to drive while drunk or drive while impaired. Let's honor those people who have died in these drunk driving -- in impaired accidents. Let's list their names and get it in the newspaper every day so that everybody in society sees that.

And another thing, and this is going to sound radical as well and I'm not necessarily suggesting it, but let's talk about the victims. Let's put a social stigma -- I'm sorry, not the victims, but the offenders. Let's put a social stigma on that so that everybody knows this person has committed this crime. And, again, this is a radical idea, but in most communities you can pull up on the Internet and see sex offenders in your neighborhood. And why? Because somewhere in society we've said this is totally intolerable behavior. Well, it is, but so is getting in a vehicle when you're impaired and going out and driving or trying to drive. So why have we not put this emphasis on things like that?

These are rhetorical questions, but the point is it's time for a radical paradigm shift if we're going to achieve that breakthrough reduction from 10,300 or 31 percent of traffic fatalities down to 0. So those are just some thoughts, not question, but it's just something I've been thinking about and I

appreciate the time. Thank you.

CHAIRMAN HERSMAN: Member Rosekind?

MEMBER ROSEKIND: Thank you. Dr. Zaouk, I realize we talked about a lot of acronyms and a lot of technology, but I just want to be clear. DADSS basically is a technology that I sit in the car and if I breathe and turn on the car it's going to detect alcohol present or not?

DR. ZAOUK: Correct. It's going to detect alcohol present at or above legal limits.

MEMBER ROSEKIND: And you say legal limit, but I guess really at this point it's a technology development project, a research project, because really the range of implementation there -- you say legal limit, but if I have a kid under 21 and I wanted zero, could that be -- that's a policy question. Right now you're still in the development phase of what's going on, and so I'm curious -- you talked about accuracy and precision and some of the challenges there. I'm curious from your perception sort of where the biggest challenges have been: technology, equipment, scaling in the future, you know, where do you see the biggest challenges ahead?

DR. ZAOUK: To be honest, it's really a balance of technology and speed of deployment or -- one of the things we're doing is accelerating the development of this. It's using technology from the defense industry and bringing it into automotive essentially, or using technology from other different

-- from various applications and bringing it to an automotive application. But the challenge has always been the accuracy and the precision that we set because, obviously, we don't want anybody above .08 to be able to drive and we want to be very accurate when we say above .08 and not just hypothetical or, you know, a close number, and the measurement speed.

This all has to be happening so fast that the non-drinking driver, the person that doesn't drink, can get in the car, start the vehicle as they typically do without being affected or without even knowing that the system has done anything. Obviously they will be notified that there's a system in their car, but it's unobtrusive. That's the idea of it.

MEMBER ROSEKIND: Right, unobtrusive, but it's basically just invisible.

DR. ZAOUK: Exactly.

MEMBER ROSEKIND: Breathe and touch the start and you've got it.

DR. ZAOUK: Yes.

MEMBER ROSEKIND: And can you be a little more explicit about the time course for the technology development and then the potential to implement this within a fleet of cars that are available?

DR. ZAOUK: Our current program is a 5-year program which ends in 2013, and at the end of that program is when we're going to be -- we'll have a demonstration vehicle. It's going to

be a DADSS research vehicle. We'll have both systems implemented to demonstrate that technology. So during that period they would have done some testing, some level of industry or automotive testing to make sure they can -- that they're qualified to be in a vehicle at the various temperatures, operating temperatures, but we're still about 8 to 10 years away from full implementation. There's still a lot of work to do.

The next phase I would envision would be a fleet deployment where you're actually deploying these in the field and looking at what are some of the issues that we're going to see. So, you know, it's a process driven approach until we have it inside a vehicle.

MEMBER ROSEKIND: And just a quick response to this, but do you have sort of consumer acceptance or other kind of research that's going on in parallel to get a sense of how people will, you know, be interested in using this kind of technology?

DR. ZAOUK: We do. We have -- we are doing sort of a public acceptance working group that looks at a lot of these issues and looks -- and evaluating what are some of the public acceptance issues we're going to have.

MEMBER ROSEKIND: Great. Dr. Taylor, besides the SBIRT, the way you call it, you also mentioned brief interventions used in emergency rooms. I'm curious. Are there other models of either brief assessment or interventions that are out there?

DR. TAYLOR: This is a major model that we have today.

There have been other models in the past, but they have not gained general acceptance. I think the fact that this one is evidenced-based, accepted by the World Health Organization, CDC, and a joint commission, this has emerged has the most well studied model that the medical community has embraced.

SAMHSA's funding about 20 sites to do what we're doing and we're one of the trailblazers in terms of training medical doctors to do this after their residency, and the problem is that most physicians don't do this detailed kind of screening and brief intervention. They don't have the time.

MEMBER ROSEKIND: And actually that's the next question which is, with an evidence-based method like this could you just make a comment about what it's going to take to scale it up?

DR. TAYLOR: Well, the scale-up is what we're doing now. It's part of the phase-in for training primary care physicians first on a nationwide basis, these 20 sites, and there also some state sites have been involved in this.

I think Massachusetts had a state SBIRT program funded by SAMHSA and there are other states that they're funding. But, again, it takes an enormous amount of resources to sustain this kind of effort and that's the key to it. Once the grants are over, can we sustain it and incorporate it into the culture of training medical residents and medical students, and therein lies the problem.

MEMBER ROSEKIND: All right. Thank you.

CHAIRMAN HERSMAN: Vice Chairman Hart?

VICE CHAIRMAN HART: Thank you. I have a question that I'm not sure who would be the best to answer it, perhaps Dr. Saltz, but if any of you have any thought on this. I'm just curious, in the broadest view, what is the trend of alcohol consumption in America generally because I'm wondering -- as I see the flat rate of fatalities in driving, I'm just wondering how does that compare with the background picture which is how much are people consuming, alcohol, historically. It seems to me that it was happening a lot more when I was growing up than it is now, but that's just an anecdotal statistical sample of one, so I just wonder if you have -- if any of you, especially Dr. Saltz, have a sense of that?

DR. SALTZ: Yeah. I could probably -- I had heard this question had come up before, so I looked up some data from the National Institute on Alcohol Abuse and Alcoholism, and general per capita consumption started rising in the late '50s from about 2 gallons a person of ethanol per capita. It peaked up in about -- let's see, I'm looking at the chart, 1985 -- let's see, 1980 was the peak of the per capita consumption. Then it trailed off again down to 2.2 gallons of ethanol per person, and now it's slightly rising again. So there was sort of a peak period there between the late '60s into 1980 and then it descended and is now just sort of waving back up a little bit. Nothing too dramatic in all of that.

And also the simple measures of per capita consumption don't look at things like the changing demographics in the U.S. and, of course, different groups drink at different rates, but I would say overall it's not as though there's a dramatic change in consumption over the last, you know, couple decades, at least since World War II.

VICE CHAIRMAN HART: So to the extent that reduced consumption is a partial answer to this, is there any lesson to be learned from history that could help us know why it came down from the peak; is there anything we can benefit from?

DR. SALTZ: No. Of course, some of these things have to do with the economy and, you know, not just economic change overall, but also again sort of the compositional effects of different, you know, cohorts of people moving into different income sectors and the like. A lot's been made about the increasing popularity of wine, but it's still fairly -- you know, its consumption is much less than that of beer and spirits. So even though we hear about a lot of trends, I would say overall the picture's pretty stable.

VICE CHAIRMAN HART: Okay.

DR. SALTZ: And, if anything, it's starting to, you know, rise up now. I wouldn't say it's an alarming rate. It's just that I'm not sure we can account for those waves.

VICE CHAIRMAN HART: Okay. Thank you. This question relates to -- oh, I'm sorry. Dr. Taylor?

DR. TAYLOR: Yeah, just another comment. A lot of this drinking has to do with taxation and availability, and so, for example, if you look up Georgia Avenue where Howard Hospital is there's a liquor outlet on every corner and sometimes two and three and they're open at 8:00. As you know, the District tried to increase their hours of bars opening to 4 a.m. That was defeated by the city council. A lot of this had to do with availability.

The other thing is certain ethnic groups tend to become more dependent at a higher rate. So if you look at Native Americans, Alaska natives, there are just some pockets where you're going to see alcoholism that will be up into the 30 to 40 percent of the population that influences these 2.2 gallons. So if you look at certain regions it will be way above the 2 gallons and other regions will be far below it.

VICE CHAIRMAN HART: Thank you. That's very helpful.

My next question relates to what Chief Mahony was presenting about point of sale. Do we have any sense of to what extent do the impaired driving population or maybe the impaired driver population involved in crashes, to what extent they became impaired at a point of sale versus at home; do we have any sense at all, any data, in that regard?

CHIEF MAHONY: On fatalities we do not. We do have research on drunk driving arrests. It is over 50 percent. A little over 50 percent of drunk driving arrests are coming from a

licensed establishment.

VICE CHAIRMAN HART: Okay. So does that tell us about -- how instructive is that about -- I mean, I applaud your programs for going to the point of sale. How instructive is that about how effective those programs can be?

CHIEF MAHONY: Well, I think it's a large portion, clearly over 50 percent. A large portion of impaired drivers are coming from these establishments. What we have seen -- and, you know, data is a big issue. It's a big problem for us because usually when we get calls we're getting calls from police departments or -- and in a couple of cases in Massachusetts, emergency room nurses that were seeing skyrocketing blood alcohol contents. So they contacted the state police; the state police contacted us, and we've been able to dramatically reduce the number of -- and, again, we don't have data on it, but dramatically reduced what they're seeing on blood alcohol contents by targeting the bars that we knew were the worst problems in that district and that city.

So I think that -- what I would really, really like is to have some professionals come in and do some data research on exactly how we can show it, but I can tell you that in cities in Massachusetts we will reduce the amount of police calls coming out at 2:00 in the morning; we'll reduce the amount of assaults at 2:00 in the morning, and we're starting to see a reduction in the drunk driving arrests that will -- we will start to see over the

next few months, but we see an immediate impact that is reported to us by police departments. Our challenge is quantifying it for boards like this, and I apologize we don't have more data, but, you know, we just put together what we could.

VICE CHAIRMAN HART: Okay. Thank you. That's very helpful. And thanks to the four of you for coming here to help us with this very important problem. I appreciate it.

CHAIRMAN HERSMAN: Thank you. I'm going to follow up on a couple of questions that have already been asked. One of the things that has been troubling to me in this whole issue is that a lot of people drink and a lot of people drive, and the combination of the two actually is the problem, and I was trying to think if we had actually changed behavior on this issue, you know, with any segments.

And, of course, we talk about seatbelt use and different things like that, but I was trying to think more about alcohol, and what struck me was if we looked back to, you know, my mother, our mothers' generations, there were pictures of pregnant women standing around holding martini glasses and a cigarette. And what we've really done in that generation, from our parents' generation to now is pregnant women really don't drink. It's very frowned upon. Society has taken a very strong attitude about it. I think if anyone sees someone who's pregnant drinking there's likely to be some intervention even if they don't know them, and I think that the fetal alcohol syndrome and those issues have been so well

publicized I think people understand that.

And so when we look at the trends and we look at the numbers I was wondering from the medical side if Dr. Saltz and Dr. Taylor have any observations of any other effective campaigns, because what we've really asked women to do is not to say don't ever drink, but we said take a time out during this period and don't drink while you're pregnant. And I think what we're trying to ask the general population to do is say -- not to ask them don't drink ever, but say don't drink and then get behind the wheel, and so take a time out in this part of your life. And so are there any lessons that we can translate there?

DR. TAYLOR: I'll start. First of all, the liquor lobby in this country is very powerful, and over the last, I'd say, 10 or 15 years there's been sort of a moratorium on advertising alcoholic beverages on television. There are a lot of rules that the manufacturers have to comply with, but they're voluntary in terms of how old the actor is in the play. They can't be actively drinking. They have to look over 25 or some other age. But I've noticed over the last several years, a couple of years, that there's been a dramatic increase in the amount of advertising for hard liquor to the point of actors simulating drinking and the like and I think that has a dramatic impact on how people drink.

There's also well-known studies that looked at targeting certain populations to drink. If you look at predominantly magazines that are marketed to African-Americans, every other page

will be either a liquor, hard liquor, beer, wine or a cigarette advertisement, and that influences the young people as they begin to reach adulthood. And we do know that the development of alcohol dependence really starts in teenagers, and by the time -- the vast age become dependent is somewhere around 20 years old. If you can get past that, you can probably avoid alcohol dependence. So a lot of it has to do with marketing and they're very good at.

The other thing is that the resources that went into these messages about fetal alcohol syndrome were primarily government-sponsored messages, and with government budgets under attack you're going to see less and less of that. So, again, it's very complex, but I think there's more money out there than we have to change the culture.

DR. SALTZ: I know we have short time, but we had a tremendous success with underage drinking and driving through the minimum drinking age law and enforcement of not only those laws, but zero tolerance for kids and decoy operations and all the rest, and so that is a significant achievement.

But your question about, you know, the kind of cultural shift, oftentimes we achieve that through making the public aware of the laws we have and, you know, credibly enforcing them and then using a public education campaign.

And I forgot to include in my presentation a key thing I think that's overlooked for RBS and that is the need for public

education, not just so the public is aware of the responsibilities of the server and understands why they're being limited in their consumption, but it also enhances the likelihood the server will take that action if the server feels it's a legitimate thing, that the customer won't criticize them when they take responsibility and decide that the customer has reached a limit of some sort, not the legal limit, but the number of drinks, whatever the house policy is.

So public education, I think, becomes key and to have it focused on professional servers is also something that enhances the likelihood it will actually happen, and it's not just up to the drinker themselves.

CHAIRMAN HERSMAN: Thank you. Can I ask my colleagues' indulgence to ask one more question? I'm sorry. I have a lot of questions for Mr. Mahony, too. It's just our time is limited.

Dr. Zaouk, can you please tell me what additional approvals that you need from the industry or the government before this equipment could become operational either in original equipment in a car or as a retrofit?

DR. ZAOUK: So the system -- these are being designed as original equipment in the vehicle, as optional equipment in the vehicle. Just like today you get a blind impact -- a blind spot detection system, it's a sensor that's going to go in the vehicle.

It's really more of a process and not approval. I think we have to make sure that the technology itself works and works

well. We can't have anybody above .08 driving, but at the same time we can't be inconveniencing the non-drinking or the person that doesn't drink that gets in the car.

So it's a process that we have to go through from meeting all the specifications that we have set, things like in the vehicle you have to go through vibration testing, shock testing. All these things take time. Similar to any device in the vehicle, it's a long process, a long development process, before you get it in the vehicle, before you are actually able to purchase it as optional equipment.

What we're doing is trying to accelerate that process by the funding that is provided and trying to push the limit of technology to make sure that we can meet these specifications. So I think, you know, it is the right course right now. We are on the right course in terms of the process that we have and we just have to continue at it.

CHAIRMAN HERSMAN: Okay. So you do or don't need any additional federal, state or industry approvals? Do you have to go through any committees, specifically?

DR. ZAOUK: It's mostly from a specification perspective, so there's SAE standards, ISO standards that we comply with, and once you do that it's up to the manufacturer to put it inside the vehicle and implement it into their vehicle platform.

CHAIRMAN HERSMAN: Okay. You can certify that you

comply with the standards --

DR. ZAOUK: Correct.

CHAIRMAN HERSMAN: -- as the manufacturer, but they have to decide if they're going to put it in the vehicle?

DR. ZAOUK: Absolutely.

CHAIRMAN HERSMAN: Okay. Thank you. Thank you so much, this panel. You all have actually such a broad swath of issues. It was very interesting to hear your presentation, and we will take a break and we will come back at 10:40. Thank you very much.

(Off the record.)

(On the record.)

CHAIRMAN HERSMAN: Welcome back. We'll now begin our seventh panel for the panel. Mr. Filiatrault?

MR. FILIATRAULT: Thank you, Chairman Hersman. The next panel, comprised of speakers from Australia, Canada and Europe, will share how countries address substance-impaired driving. Mr. Mircea Steriu from European Transport Safety Council will begin with a discussion on the effectiveness of countermeasures and recommendations for reducing substance-impaired driving in Europe. Mr. Steriu.

MR. STERIU: Thank you, Mr. Filiatrault, thank you, Chairman, for having me, and this will be a very good opportunity to share the experiences from Europe and see if any of the measures that we have taken over there can be translated and used in the United States. So this is actually a very good opportunity

to me to show what we have been doing in Europe in terms of reducing drunk driving.

CHAIRMAN HERSMAN: I think we just need to put up a different presentation. Just one second.

MR. STERIU: Of course, yeah.

All right. Thank you. So I'm going to start you off with what the European Transport Safety Council is doing in their work on drunk driving. Then I'm going to show you our preliminary results of a ranking of European Union member states in term of combating drunk driving. Then I'm going to give you several examples of interventions that have been undertaken in selected member states. And, finally, I will wrap it up with a short piece on trying to tackle drunk driving.

So the European Transport Safety Council is basically an advocacy group with our mission statement being to reduce the number of deaths and serious injuries occurring from transport in Europe, and we were basically in the area of road safety and, of course, drunk driving is a very important issue that we have to tackle. So I'll just dive right into giving you a background on what is happening in Europe in terms of drunk driving.

And I'm wondering why the slides don't come up right. Just to ask, are you seeing my slides?

CHAIRMAN HERSMAN: No. I think -- Jenna, can you help, and Nicholas can change the slides for him maybe. Just let them know what slide you want to see come up and they can pull it up

for you.

MR. STERIU: I should be on the fifth slide. The title should be Background to Drunk Driving in Europe. If you don't mind, I can actually move forward --

CHAIRMAN HERSMAN: Sure.

MR. STERIU: -- so unless that's actually -- it's a problem with you, we don't have to wait for this.

So in terms of how widespread the problem is, up to 2 percent of all of the kilometers which are being driven in EU are driven with BAC concentration which is above the legal limit within the particular member state. And for an estimate of size, 11 percent of the total number of road deaths which were recorded in 2010, 31,000 of them were attributed by the governments directly to drunk driving. However, there is a little bit of an issue of underreporting and the European Commission has actually estimated -- can I work through this? Okay. So the European Commission has estimated that about 25 percent of all road deaths are alcohol related in EU. So based on this number we estimated that in 2010 some 6,500 deaths could have been prevented if actually all the drivers had obeyed the legal BAC limits in their own country.

However, as we have seen yesterday as well, there are issues in terms of how drunk driving deaths are being reported and attributed in each European Union member state, and there is quite a range of variation. So in 2010, 7 of the 27 union member states

attributed less than 6 percent of their road deaths to drunk driving, while at the better end we would say 5 countries attributed more than 30 percent, so we know that the average is somewhere in the middle of that.

Now, however, we have seen quite a marked progress in reducing the number of deaths which are attributed to drunk driving, and you'll see there the darker green line is the number of deaths which were attributed to alcohol while the lighter green line is all other deaths, so any other causes.

And basically between 2001 and 2010, which is our 10-year reference period, we have seen a 53 percent reduction in the number of deaths attributed to drunk driving, while for the corresponding number of other road deaths we have seen a reduction of only 47 percent. So that issue of plateauing that we have seen here, we have done a little bit better progress in Europe in reducing deaths which are attributed to drunk driving.

However, beyond this aggregate measure what we wanted to do is have a meaningful country comparison and see which countries are doing better or not, so we needed to create an indicator which would capture this difference between member states.

So in building this indicator we had several aspects that we needed to take into account and we know that general road safety measures will have an effect on all the number of road deaths, whether they are attributed to drunk driving or not. However, if governments implement measures which are specifically

targeted at drunk driving they will have a faster effect in reducing the number of deaths which are specifically attributed to drunk driving. So basically in order to compare member states' performance we chose to look at the difference between the average annual percentage change in the deaths attributed to drunk driving and those in other deaths.

And I will move right through to the lead table that we have here. You will see that the countries in the green area mean that they have done better in reducing deaths attributed to drunk driving than other road deaths and we have our best performers. They're Ireland, Slovakia, Latvia, Bulgaria and Hungary who had done significantly better in reducing road deaths attributed to drunk driving. While on other hand those in red mean that there has been a slower progress in deaths attributed to drunk driving than general road safety progress. However, for all of the EU, you see there that the average is below 0, so on average the whole of the EU has done just better in reducing deaths attributed to drunk driving.

However, I also want to make it very clear that even in those countries where general road safety improvements have been more marked than those in reducing drunk driving deaths, reductions have still been observed, so you will see that quite a lot of the countries actually are below the zero line, so within the 10 years that we looked at some progress has been made. It's only the countries in red, particularly Italy, Cypress and Israel,

where we have seen an actual increase in the number of deaths which are attributed to drunk driving. And this being the data that we have, one of the solutions and interventions that was put forward in this forum as well and it's very much within the ETSC recommendations in order to tackle drunk driving is to have highly visible enforcement.

Now, in terms of an indicator to see how countries are doing in enforcing drunk driving laws, what we did was look at the number of alcohol checks which are performed and then, of course, weighed this number by population. So the way that you should be looking at this ranking that we have here is that basically in the best performing country, which is Finland, for an average driver in 2010, the year that most of this data is for, there was about a 43 percent chance of being stopped at random and being checked for drinking and driving. While, of course, you see there's also quite a lot of variation and for the average British driver this probability of being stopped and checked is only 1.4 percent.

However, we wanted to make sure that this picture is not somewhat biased because due to limited resources some countries might choose to actually target their enforcement checks and perform them at several times of the year or in specific locations where they are actually way more likely to have drivers who are under the influence being checked. So you will see that the percentage of those tests which are above the legal limit are in the second column, and also we're tracking an indicator which is

looking simply at the number of positive checks for a 1,000 population. So just to be clear, positive means above the legal limit, so some corrective action has to be taken against the driver.

One of the other -- and now I'm going to talk a few minutes about the interventions which were taken to tackle drunk driving in several of the member states. To start you off I'll put up this table which is showing the prevailing drunk driving limits in the member states of the European Union. You will see highlighted in red are the only two countries, being the U.K. and Malta, where the BAC limit is still at 0.8. All of the others have gone somewhere below that.

And also a trend which we have seen in Europe and it is very encouraging is that many countries are choosing to differentiate their BAC limits according to the type of driver, so novice drivers and professionals actually have to have lower BAC limits than what we would call regular drivers.

Now, I will talk to you about Ireland because this is one of the examples where the BAC limit was reduced. This change was codified into law in 2011, and it was quite a lengthy process. I would say it took several years. But in order to achieve this change in legislation, what they had to look at was approach drunk driving as a public health concern. This ties into what we were seeing in the last panel.

So up there on the slide you see several of the issues

in terms of driving in general that had to be taken into account when devising the legislation in Ireland. And just to be -- to give you an indication of the size, you see that 1.5 million adults in Ireland drink in a harmful pattern while the whole population is about 6 million, so just to give you an indication of the size of consumption in Ireland in general.

And moving straight to the actual legislation, so the lower BAC was introduced in July 2011 and, as I mentioned, this was done in various steps for regular drivers and for learner drivers. It was changed to 0.05 for regular drivers and 0.02 for novice drivers, so people who are within the first 2 years of having a license, and also for professional drivers.

Now, this legislation was not just put on a piece of paper and it wasn't -- the change didn't come alone. It was actually coupled with tougher sanctions, which you see there on the board. And one of the issues that has to be taken into account is that all of these sanctions are actually automatic, so if you are within those -- if the BAC level is passed, the sanctions are doled out automatically so you don't have to go to a judge unless basically the BAC level observed is above .10.

And in terms of other interventions which have been taken to tackle drunk driving, an important technological device is the rollout of alcohol interlock devices. This has been done largely throughout Europe and three times a year the European Transport Safety Council is publishing what we call an Alcohol

Interlock Barometer where we track the logistical developments in EU member states and see how the devices are being used, whether in rehabilitation or also just in commercial transport. So we're trying to get an accurate measurement of how they're being used.

And I will focus on the case of France, which introduced them at the regional level first. The reason why I chose France for this presentation is because it's the only country where alcohol is the main factor in accidents; usually it is speed.

So basically the pilot project introduced in 2004 provided that offenders with a BAC between 0.8 and .16 had to use one of these for -- or one of the devices for 6 months, and they had to pay for the installation themselves. The fee was about $1,500. In terms of the effects of this device, you see there was a four to five lower rate of recidivism among the drivers who had this installed. And the project was expanded afterwards to other regions and also it has been extended to buses carrying children whether the driver was recidivist or not.

Moreover, as an educational measure and as a measure to increase the awareness of the population to the dangers of drinking and driving, starting in June 2012, French drivers must have a portable breathalyzer in their car. And also every -- so about three times a year we are tracking the developments in general in tackling drunk driving in Europe and we publish a newsletter, which I can provide to the docket with the recent developments in the EU member states.

So in terms of their recommendation that we're proposing to member states -- you will excuse me if I go just a little bit over because of the start? Okay.

We considered that member states adopt a zero tolerance to drunk driving in general, and we recommend that this is complemented by tougher law enforcement, including actual targets for the number of checks that would be -- that have to be performed.

We also recommend that systematic breath testing is included as a standard procedure in all collisions. And in order to address recidivism we're looking at higher penalties and also the introduction of rehabilitation programs, whether through the alcohol interlocks or through educational courses, and, of course all of these have to work hand-in-hand with awareness raising campaigns which will raise the attention of the population to the risks of driving.

Now I'm going to move very swiftly to drugs, and the main project in Europe, which was looking at how drugs influence driving behavior, was the DRUID project. The main finding was that alcohol actually still remains the main problem in terms of traffic safety. However, unfortunately, drugs and psychoactive medicines can constitute a problem in traffic safety.

What was very interesting to show was that the target group was different, and for psychoactive medicines the main problem group that had to be looked at was older female drivers,

and in terms of the time of day when offenses are occurring it was actually daytime hours. However, the prevalence of illicit drugs in the driver population was shown to still be lower than alcohol prevalence.

And in terms of the research, this is coming from one of our members, because one of the issues always when thinking about the influence of drugs is trying to figure out a way of knowing which drugs are harmful and how do they actually impair driving, so our Norwegian member had a research study commission where basically there was correlation between all of the substances that you see up there on the slide and the level of impairment which they induce into drivers. Thank you very much.

MR. FILIATRAULT: Thank you, Mr. Steriu. Our second presentation is from Professor Barry Watson from the Centre for Accident Research and Road Safety in Queensland. Professor Watson will discuss the prevalence, regulatory approaches and countermeasures for reducing substance-impaired driving crashes in Australia. Professor Watson?

DR. WATSON: Well, thank you and good morning. Firstly, I'd like to thank the Board for the invitation to come along today to provide you with an Australian perspective on the impaired driving problem.

Next I'd like to give you a brief overview of what I'll be covering today. To set the scene, I'll present some data highlighting the prevalence of impaired driving in Australia.

I'll then explain the regulatory processes we have in place to manage what we refer to as drink driving and drug driving as well as the key countermeasures we have implemented over the years.

In particular, I'll focus on the general alcohol limit of .05, which we have adopted across the country, as well as the role and effectiveness of random breath testing, or RBT, which is our main drink driving enforcement tool.

I'll then provide an overview of one of our newer countermeasures, random drug testing. I'll finish with some brief comments on the challenges still facing us in Australia and key priorities for the future.

Okay. Well, to commence with alcohol-impaired driving or what we call drink driving, this graph shows the long term trend in the percentage of drivers and motorcycle riders killed in Australia with a blood alcohol concentration of .05 or more where the BAC is known.

As can be seen, Australia experienced a major decline in alcohol-related fatalities during the 1980s and 1990s similar to many other motorized countries around the world, including the USA. However, this decline appears to have plateaued since the late 1990s at around 25 to 30 percent, representing a major challenge for road safety authorities in Australia.

Notwithstanding this plateauing, however, it is important to note some key aspects about the Australian experience. Firstly, various evaluations have indicated that the

reductions we have experienced were associated with the introduction of key countermeasures like the lower BAC limit and RBT, a point I will turn to later.

Secondly, Australia's performance would look even better if we presented the data in terms of those killed with a BAC of .08 or more to allow a comparison with countries like the U.S. since this would reduce our figures by another 3 to 5 percentage points depending on the year. Or, conversely, if the data was presented in terms of .08, your data will be up around the mid-30 percents.

Finally, this aggregate level data obscures the fact that some Australian states do perform better than others. To illustrate this point, this graph presents the same data from our home state of Queensland. As can be seen, the general pattern is very similar to the whole of Australia with major reductions in alcohol-related driver and rider fatalities occurring in the 1980s and the 1990s followed by a plateauing. However, consistent with the recent strong focus on the issue of drink driving, the percentage of fatalities at .05 or more has been averaging down around 25 percent over the last 3 years, which, again, would be lower if measured at .08 or more.

I should also note that our two most heavily populated states, Victoria and New South Wales, have had even lower percentages in some recent years, getting down to the low 20 percents for those killed at .05 or more.

With this background I would now like to briefly explain the evolution of drink driving countermeasures in Australia. I should note that this list is not meant to be exhaustive and I've kept the time frames relatively broad since these countermeasures were implemented at different times across the states.

The foundation for our approach was in the late 1960s and early 1970s when all the states adopted per se drink driving laws based on the Scandinavian model. During the 1990s this approach was strengthened through the lowering of the alcohol limit to .05 and by introducing random breath testing and mandatory penalties for drink driving, which meant that the vast majority of drink drivers experienced some form of license disqualification.

Then during the 1990s there were further refinements with the introduction of a zero alcohol limit for learner, provisional and professional drivers, which includes truck and taxi drivers, and ongoing strengthening of penalties, including the introduction of immediate license loss for high range offenders.

While most states introduced some form of rehabilitation for offenders during the period, it remains voluntary in many states, thus limiting its uptake. Then over the last decade most of the Australian states introduced alcohol ignition interlocks and vehicle impoundment for high range and/or repeat offenders.

Now, to illustrate the impact of some of these

countermeasures I would like to present a case study from my home state of Queensland. We commenced breath testing around the same time as many of the other Australian states and then lowered the alcohol limit to .05 in late 1982. However, we delayed introducing RBT despite its widespread implementation in other states due to the perceived civil liberty concerns on the part of then state government.

Instead, they introduced a weaker form of breath testing in 1986, which is referred to as Reduced Impaired Driving, or RID. The program was similar to sobriety checkpoints currently implemented in parts of the USA in that the police could randomly pull over drivers, but could only breath-test those that they suspected had been drinking.

Finally, after mounting pressure from the road safety advocates and encouraging evaluations from other states, the state government finally introduced RBT in 1988, which enabled the police to pull over drivers at any time or place and request a breath test. These changes were each supported by extensive public education and the strengthening of penalties.

Now, to illustrate the effects of these initiatives, this graph is drawn from a study that I conducted in the late 1990s. It used a method called regression discontinuity to compare the time periods following the introduction of each of these key countermeasures.

As can be seen, the introduction of .05 limit, RID and

RBT were all associated with step-wise reductions in the number of alcohol-related driver and rider fatalities. All of each were significant and consistent with other evaluations at the time. Our data indicated that the introduction of .05 was associated with a 12 percent decline in alcohol-related fatalities relative to non-alcohol related ones, and the introduction of RBT with a further 18 percent relative decline in fatalities.

Importantly then, the progressive implementation of these countermeasures not only contributed to the overall decline in drink driving fatalities in Queensland, but the implementation of RBT appears to have produced benefits over and above the weaker form of breath testing we had in place at the time which was akin to sobriety checkpoints.

This leads me to tell you a little bit more about RBT since it is our primary drink driving law enforcement tool used throughout Australia. As I already mentioned, the legislation underpinning RBT allows the police to pull over and breath test drivers at any time irrespective of whether they suspect they have been drinking or not.

The majority of RBT operations across Australia are conducted in a highly visible stationary mode using either large buses, colloquially known as "booze buses", or marked police cars. While these operations are designed to catch drink drivers, the key goal is to promote general deterrence through their highly visible nature.

However, the police do have the power to conduct mobile RBT as well, whereby a moving police vehicle can pull over drivers at any time and request a breath test, which is very useful for catching drivers trying to evade the stationary operations.

RBT is typically supported by mass media advertising using messages such as 'anywhere, anytime' to reinforce the general deterrent effect. It is also important to note that there is very strong community support for RBT across the country with a recent community attitude survey showing 98 percent approval nationally for the countermeasure.

Now here's a photo of a booze bus RBT operation, and I apologize for the old-fashioned nature of the photo, but it does highlight that we've had RBT operating for some time. Now, as can be seen, the booze bus is parked on the side of the road and upwards of six police officers can conduct breath tests on drivers passing by. Depending on the traffic volume the police may pull over every driver that passes by or randomly select vehicles from the traffic stream.

The testing process is relatively quick with drivers only detained for a minute or two. However, if a driver fails the preliminary breath test they are then required to undertake an evidentiary breath test in the bus. If they fail that, they are charged to appear in court and are required to leave their vehicle on the side of the road and arrange alternative transport while also being immediately suspended from driving for 24 hours.

This is a photo of a car-based RBT operation, which essentially involves the same process, but those drivers who fail the preliminary breath test are transported to a police station to undertake the evidentiary breath test.

Now as an aside, drivers can refuse a breath test in Australia, but if they do, they are then charged with the equivalent of a high range drink driving offense.

Now, more generally, a range of evaluations have been conducted across Australia confirming the effectiveness of RBT in reducing alcohol-related crashes. However, the degree of effectiveness does appear to be linked to the way it's implemented with the best results obtained when it is conducted in an intensive 'boots and all' fashion featuring high sustained levels of testing and ongoing innovation designed to maintain its public profile as a general deterrent.

It should also be noted that considerable resources are devoted to RBT across Australia with many states conducting the equivalent of one test per licensed driver every year, so in Queensland this equates to over 3 million breath tests every year. Not surprisingly then, the perceived risk of getting caught for drink driving has been found to be higher than for other illegal behaviors like speeding or not wearing a seatbelt.

Similarly, the penetration of RBT into the Australian community is very high. As shown in this graph, approximately 75 percent of drivers surveyed nationally consistently report having

seen RBT in the last 6 months. More particularly, upwards of 30 percent of respondents report having actually been breath tested in the last 6 months, which I think is possibly the highest rate of testing of this type in the world.

Okay. I'd now like to turn to the topic of other drugs and their impact on driver impairment. Now, like many other countries, Australian road safety authorities are concerned about the prevalence of drugged driving and its impact on crash risks. While there is variation in international studies, a large Australian study indicated that over a quarter of the motorists killed over a 10-year period on our roads had drugs other than alcohol in their system, the large majority of which were considered to be impairing.

In terms of the prevalence of the behavior, a Victoria roadside study found that 2.4 percent of drivers pulled over were positive for cannabis or amphetamines, which was twice the detection rate at the time for drink driving. More recently, a Queensland roadside study found that 3.1 percent of drivers tested had a drug in their system other than alcohol.

Now, in response to this problem Australia has been one of the world leaders in the area of random drug testing, first implemented in Victoria in 2003. Now our approach is modeled on RBT and underpinned by per se legislation whereby it's an offense for a driver to be detected with any concentration of a prescribed illicit drug in their system or to refuse a test for it. The

drugs currently tested for at the roadside are cannabis or, more particularly, THC, amphetamines and methamphetamines and MDA, or ecstasy.

The roadside process builds on RBT, whereby the drug test is only undertaken if a driver passes the preliminary breath test because those who fail the preliminary breath test are charged with drink driving anyway. So for those who do pass the preliminary breath test an initial oral fluid drug test is undertaken for screening purposes, which takes approximately 5 minutes. If the driver fails that test, they then undertake a second oral fluid test in a specially equipped bus, which takes 15 minutes following a 20-minute observation time. While this overall time frame is longer than that for RBT, it is a stringent process designed to avoid misidentification and is further backed up by subsequent laboratory tests on the oral fluid.

Okay. Now, unlike RBT which typically targets all drivers, random drug testing tends to tie the two high risk groups, truck drivers and young drivers, due to the higher incidence of drug use among these drivers. Nonetheless, the highly visible approach taken to the testing is still designed to heighten its general deterrent effect.

However, a major limitation is the cost involved in conducting the oral fluid tests compared to breath testing. As a result, far fewer random drug tests are conducted each year across Australia. For example, while 3 million breath tests are

performed each year in Queensland only 30,000 drug tests are conducted. However, the detection rate for random drug testing tends to be higher than for RBT, most likely due to the targeted nature of the testing and also the higher prevalence of the behavior.

So, for example, the detection rate for drug driving in Queensland is currently 1 in 40 drivers, or 2½ percent, compared to 1 in 120 drivers, or .8 percent, for drink driving. I should also note that while few evaluations have been conducted to date into the effectiveness of random drug testing there is some evidence that it has increased the perceived risk of apprehension among particular groups of drivers and the detection rates have been declining particularly among truck drivers.

This photo shows the specially equipped or identified bus for random drug testing in Queensland designed to enhance its general deterrent effect, and this photo shows the police officer requesting the first oral fluid sample as part of the drug testing process.

Okay. Well, to wrap up, then, I'd like to note some of the challenges for the future beginning with drink driving. As I explained earlier, the involvement of alcohol in driver and rider fatalities in Australia appears to have plateaued albeit at a lower level than in the USA. Moreover, this plateauing may in part be due to the countervailing influences of alcohol becoming more generally available over the recent decades in Australia and

an increase in binge drinking particularly among young people.

I should also note that Australia does not utilize fiscal policies to any large extent to manage alcohol use. Lastly, the uptake of alcohol ignition interlocks and drink driving rehabilitation programs remains relatively low in many Australian states.

In terms of drug driving challenges, as I already mentioned, the higher costs associated with conducting the random drug tests make it difficult for us to replicate the 'boots and all' approach achieved with RBT. Drug detection methods also need to be made more sensitive to particular drugs in order to keep up to date with changing drug use patterns in the community.

Furthermore, little attention is being given in Australia to the influence of prescription drugs on driver behavior, although our Centre has done some research looking into the effectiveness of the current warning laws we use on our prescription drugs, which do appear to be inferior to innovative approaches being used elsewhere, particularly the traffic light system being used in France, and I believe being picked up elsewhere in Europe.

To conclude then, I would like to outline what I see as the key priorities for reducing impaired driving in the future, both in Australia and elsewhere. First, I think it is critical that we continue to enhance policing programs to maximize their general deterrent effect while ensuring that they are rigorous

enough to counter the evasion techniques of drivers.

Secondly, we need to acknowledge that some of the drivers detected for drink driving are also impaired by other drugs which significantly increases their crash risk and, thus, we need to better identify and manage these particular drivers.

Thirdly, we need to improve the management of recidivist drink drivers through the wider uptake of alcohol ignition interlocks, vehicle impoundment and rehabilitation programs. Similarly, we need to improve the management of recidivist drug drivers, which is an issue untouched at the moment in Australia or elsewhere.

Lastly, as has been mentioned by many other presenters over the last 2 days, we need to plan for the long term and develop reliable, non-intrusive alcohol ignition interlocks that can be fitted into all vehicles.

In closing, I would like to acknowledge my colleagues at CARRS-Q and the Queensland Police Service who assisted me with the preparation of this presentation, particularly Drs. Jeremy Davey and Narelle Haworth. Thank you.

MR. FILIATRAULT: Thank you, Professor Watson.

Mr. Martin from the British Columbia Ministry of Justice is our final presenter. He'll provide an overview of Canadian countermeasures for reducing impaired driving and discuss the effectiveness of countermeasures that were implemented for addressing alcohol-impaired driving in British Columbia.

Mr. Martin.

MR. MARTIN: Thank you. Madam Chairman, members of the Board, good morning. I have to say I'm very honored to be here among the very many distinguished presenters, and I have to say Washington's one of my favorite cities, so it's great to pop in for a couple of days.

A brief overview of --

CHAIRMAN HERSMAN: We don't have too many people saying that Washington is their favorite city, so thank you.

MR. MARTIN: You're welcome. A brief bit of context, my office is a division of the BC Ministry of Justice. We're the lead provincial agency and champion for road safety. We're responsible for policy and legislation, driver improvement programs, administrative justice and driver medical fitness. That context might be a bit useful for you as we progress through the presentation.

The legal impaired driving framework in Canada is divided into two levels. We have a federal law, that's the Criminal Code of Canada impaired driving provisions, and, second, we have provincial laws which are administrative impaired driving laws.

Much of my presentation will be about provincial law and, in particular, our BC laws, but I have to say at the outset that provincial laws in Canada form a major part of the overall countermeasures for impaired driving. If convicted of a Criminal

Code impaired driving offense, a citizen will receive a driving prohibition, fine, and, in some instances, jail time.

Now I'm going to skip over the next couple of slides. The issue of drugs and driving I think has been well represented by other presenters and I don't really feel I have any value to add here.

In terms of provincial and territorial impaired driving laws, this is a detailed picture of provincial administrative sanctions for drivers in the .05 to .08 range. The real takeaway from this slide is that a number of provinces have escalating sanctions for impaired driving in this zone.

Similar to the last slide, this slide presents a snapshot of provincial sanctions in the over .08 range. Here there is a wide variety of approaches and sanctions for both .05 to .08, and over .08 Provincial laws are constantly evolving.

So the context behind the BC approach which was implemented in September 2010 can be summed up in this chart which demonstrates that progress in addressing alcohol-impaired driving essentially stalled in the year 2000, and this is not dissimilar to your U.S. experiences as noted yesterday by Dr. Hedlund.

Prior to September 2010, our countermeasures were limited to Criminal Code sanctions, administrative 90-day prohibitions for over point .08, and in that instance the driver had to be processed at the police station and there was a 21-day delay before the prohibition took place. And, of course, we had

-- for .05 to .08 we had 24-hour roadside prohibitions and possible vehicle impoundment.

We had a number of challenges. We had consistent high levels of alcohol-impaired driving as measured by roadside prevalence surveys. We've had poor outcomes, which I've just mentioned, high recidivism rates and ineffective and inefficient use of costly police resources, and we had significant pressure on our court system.

In BC we were fortunate to have good longitudinal data on the prevalence of alcohol-impaired driving. Since 1995 the Canadian Center on Substance Abuse has conducted roadside nighttime surveys and this involves randomly selected drivers who are asked to voluntarily provide a breath sample. The results show that between 2 and 3 percent of drivers had a BAC above .08 and between 3 and 5 percent had a BAC of over .05. And while these percentage numbers may seem small, when expressed in terms of the number of drivers, 1 out of 27 drivers was impaired by alcohol, and I don't know about you, but driving home on a weekend evening, that's not very good odds.

Recidivism for Criminal Code sanctions was over 20 percent, and for 24-hour roadside prohibitions it was over 30 percent. Criminal Code impaired cases took up over 30 percent of total provincial court hours and these cases consumed 4 to 5 days of police effort. And, as we know, criminal cases are complex and often difficult for the Crown to prosecute. Over 30 percent of

charges are pled down to a lesser charge, which means appropriate sanctions are not applied.

While our new approach was informed by evidence and the challenges which I've spoken of, it was inspired by the tragedy of 4-year-old Alexa Middelaer who was run over and killed by an impaired driver in 2008. She was standing at the side of the road late one afternoon petting her favorite horse with her aunt by her side. In implementing our new sanctions, the province adopted her parents' bold vision that impaired driving fatalities be reduced by 35 percent by what would have been Alexa's 10th birthday in the fall of 2013. You will see in a few minutes that we've already succeeded and surpassed this vision.

BC's new approach and the results that we've achieved is really why I'm here today. What we did wasn't complicated. I call it Behavioral Intervention 101. To be truly effective and change behavior consequences must be clear, they must be swift and they must be severe.

I'll now talk to you about what we did and then I'll talk to you about how we did it, which in my mind is as equally important. In what we call the Warn Range, .05 to .08, the new law enables police to intervene immediately at the roadside with tough escalating sanctions, prohibitions, vehicle impoundments and monetary penalties. In addition, three sanctions inside of 5 years will trigger a driver into mandatory user-pay ignition interlock and driver education or counseling.

In what we call the Fail Range, over .08, the new law enables police to intervene immediately at the roadside with even stronger sanctions, prohibitions, vehicle impoundments and monetary penalties, a prohibition of 90 days, a vehicle impoundment of 30 days and a monetary penalty of $500. In addition, every sanction automatically triggers a driver into mandatory user-pay ignition interlock and driver education or counseling.

When you're innovating the only thing that you can be certain of getting 100 percent right on the first pass is the status quo which, of course, by nature really isn't innovating, so, predictably the new law was challenged on the basis that it infringed on the Canadian Charter of Rights and Freedoms.

Given the significant penalties and remedial program requirements for a driver who blows a fail, the court found that the legislation in its current form infringes on the Charter to the limited extent that the existing administrative appeal process does not provide the driver with the ability to meaningfully challenge the results of the roadside breath test. Simply put, the court found our appeal grounds were too narrow.

Fortunately, the supreme court ruling was prescriptive in nature in that it was specific about its concern. Because of this, it was relatively straightforward for us to craft amended legislation to specifically address the court's concerns. The proposed changes are currently being debated in our provincial

legislature this week and we expect that an amended law will take effect on June 15th of this year.

I'm going to skip over this slide and come back to it if we have time.

Prior to the new sanctions, police generally had a low sense of efficacy when it came to impaired driving. It was a lot of work and our outcomes were not improving. One of the goals of the new BC model was to make more efficient and effective use of frontline police resources. Having a law is one thing. Having a law that works effectively for police on the street is another. Over my career I have seen many laws that are great in theory and intention, but just don't work from an operational perspective.

Our new approach, especially for over .08, dramatically reduces the time it takes for police to process drivers. This has given police the ability to significantly screen more drivers for possible impairment, effectively increasing overall enforcement within existing resource levels.

As mentioned previously, the province adopted the goal that impaired driving fatalities be reduced by 35 percent by the year 2013. The green bars represent the 5 years prior to implementation of our new approach and, taken together, the gray bars represent a 35 percent reduction as compared to the average over the previous 5-year period. The yellow bars represent our actual progress to the end of 2011. Compared to both the prior 5 and 10 year averages, the new approach resulted in a 40 percent

reduction in its first full year of implementation. This directly saved 45 lives.

It is our hope that with fail range sanctions back in play on June 15th, by what would have been Alexa's 10th birthday in the fall of 2013, we can reach a sustained level of a 50 percent reduction in alcohol and impaired driving fatalities. Although we didn't specifically set a public goal related to serious injuries, compared to both the prior 5 and 10-year averages, the new approach resulted in a 51 percent reduction in its first full year of implementation.

As I said earlier, the how we did things was equally as important as the what we did. As you might expect, many jurisdictions have inquired about our new approach and I've cautioned everyone that just implementing what we did, the specific basket of countermeasures is not likely to achieve the same results unless you understood how we did it.

Impaired driving is complex. If the results were easy to achieve we wouldn't be here this week. Incremental adjustments to our approach were not working. Relying on the criminal system and limited administrative sanctions was not working, so we set out to change the game because if we continued to do what we've always done we'd get essentially what we've always gotten which was we were stuck.

To do this we spent considerable time understanding the interrelationships between the various parts of the system, the

interests of all the partners and how we could actually expand our value proposition beyond just safety. We did this at a time of fiscal restraint and we were competing with jobs, health care and education. It was a tough time.

By adding value for our funders, the court system, police agencies, stakeholders, victims and our political masters, we were able to create alignment around a vision and genuine enthusiasm to a new way of approaching a very difficult problem.

Road safety approaches can be very fractured. There are many, many players in the system and everybody's doing a great job. Often they're doing a great job in their particular area. So it was a systemic approach that we used to really bring about the change and that's why I counsel others to really look at how we did things, as much as the actual what we did.

I have a couple of seconds. Well, I'll just finish off and I'll go back to that one slide if I can.

As I mentioned, in the first year we saw 45 fewer fatalities. Our vision is your vision. It's towards zero. We believe this absolutely possible. We think we can get to 50 percent by the end of 2013, and I think with some of the other measures that you've heard over the last couple of days, I think that we can drive that down to zero. Thank you.

Actually, I've got a minute to spare, so I'm just going to zip back to a chart which just gives you an indication of the dramatic impact that we had on court workload.

Immediately upon implementing the new law police began using the new administrative sanctions for everything but impairment that related to a crash, a serious fatality or absolute gross impairment where somebody was falling down drunk, so you can see that we had a dramatic decline.

We had a supreme court ruling last November, and so we suspended our fail range sanctions. Predictably, the cases being sent through the criminal process increased immediately, and with the amended law we predict that we will be back to where we were before November.

So I've got the amber light, so being a good road safety professional I'm going to stop there not go through the intersection.

MR. FILIATRAULT: Thank you, Mr. Martin. The Technical Panel will now take 5 minutes to pose some questions to the panel.

MS. ROEBER: Thank you all. Yesterday we -- Jim Hedlund made the point that we drink and we drive and it's the intersection of the two that creates the challenge. We also heard that impairment really begins with the first sip of alcohol and that at point .05 to .09 you're talking 11 times greater crash risk. Given that you are from countries that take action as low as .05, if not lower, I'm curious to know what effect that has on consumption?

DR. WATSON: The data for -- I must admit I'm not fully familiar with the alcohol consumption data in Australia, but the

general pattern, I understand, was very similar to what Dr. Saltz explained for the U.S. earlier today, that during the 1980s we had a declining consumption. A lot of that is attributed to the impact of our drink driving enforcement, and I can -- just as an example I'll give you a cultural example. It was very popular in Australian society to have a shout when you went to what we called the pub, the drinking venue, where it was common that you'd be in a group of people and that one person would buy a drink and then you couldn't leave until everyone else in that group had bought a drink, and that everyone had then consumed as many drinks as there was within that group.

After the introduction of RBT the survey evidence suggested that it was a lot easier for people then to say no, that they didn't want to drink as much, because they had a reasonable excuse being that they might get caught. And, in fact, I've seen a paper at a conference that was called The RBT and the Death of the Australian Shout.

So culturally is has caused an impact on our drinking, I'd say more on the patterns of drinking with a lot more drinking occurring at home now than in venues. Having said that, I've been advised by my colleagues that over recent years alcohol consumption is going back up a bit, similar to what Dr. Saltz said about the United States. So I think definitely our drinking patterns have been influenced by our lower limit and the enforcement of it, but to some degree there's probably been a

shift of where that alcohol consumption's occurring.

MR. STERIU: Yeah. Once again, I'm also not particularly familiar with drinking habits throughout Europe. I did show you the example from Ireland and I think that would be fairly comparable. However, what I can say is actually that the data that I presented to you was collected and analyzed in the framework of a project which is sponsored partly by a drinks company, and in Europe they have been fairly positive, actually very positive, to the designated driver campaigns which were being implemented. So I would say the focus of the driving has changed, but in terms of consumption it hasn't really been affected. Otherwise, the alcohol companies would have been against it.

MR. MARTIN: And I'll give you a quick snapshot. We track alcohol consumption quite closely in British Columbia. Of course, all liquor sales are run through the provincial wholesale network. And I would have to agree with Barry, is that, you know, we've seen a slight shift in terms of patterns of consumption. I wouldn't say we've seen a dramatic shift in consumption.

MR. FILIATRAULT: Thank you. We heard yesterday about a No Refusal program or by somebody who was arrested, their refusal to provide a sample to be tested. I wonder if each one of you could kind of -- you talked on it, Professor Watson, briefly, but I wonder if each one of you could talk about what would happen in your particular country or in European nation countries, what would happen if said driver refused to provide a sample? Starting

with you, Mr. Martin.

MR. MARTIN: A refusal, unless there's a specific medical reason why you can't provide a breath sample, is treated the same as a fail, so it gets the same consequences as a fail range sanction.

DR. WATSON: Similarly, as I mentioned in my presentation, for both drink driving and drug driving, if a driver refuses to provide either a breath or oral fluid sample it's going to be the equivalent of a high range offense. However, there is also a provision for blood to be taken if there's a genuine reason why they can't provide the breath or the oral fluid sample, so there is some flexibility - it's not so draconian in some senses, but certainly a refusal is going to be the equivalent of a high range offense, and unless you are a high range offender you'd be better off providing the sample.

MR. STERIU: In fact, that's exactly the same approach that we have in Europe and most of the countries; actually providing a sample is a better defense than refusal to do so.

MR. FILIATRAULT: Thank you. I see we're out of time, so, Chairman Hersman, I'll pass the panel on to the Board for further questions.

CHAIRMAN HERSMAN: Thank you. Member Weener?

MEMBER WEENER: Thank you. A question for Mr. Steriu. What are generally the drinking ages in Europe, in the EU?

MR. STERIU: For spirits it's 18. For beer and wine,

16.

MEMBER WEENER: Okay. Beer and wine, 16; spirits, 18. Just a note with regard to the Ireland example that you had that was 11.9 liters per year. When you convert that into U.S. gallons, that's 2.6 gallons, so that's just a little bit more than what the previous panelist said was the amount for the typical U.S. I find that interesting.

Is France worse than Ireland, for example, in terms of consumption?

MR. STERIU: They have a different consumption pattern, namely, that they will drink more wine rather than hard spirits or beer, but in terms of the pure alcohol they are a little bit lower, yes.

MEMBER WEENER: They're a little bit lower.

MR. STERIU: Yeah.

MEMBER WEENER: And I find it interesting that France as of June is requiring a breathalyzer in all vehicles. What are the requirements for use of the breathalyzer?

MR. STERIU: If you are being stopped in a random breath test and you're are being -- the breath test shows up as positive, the policeman is going to ask why you didn't use that and you're going to get a fine for it. Moreover, if you're being stopped for whatever reason you're also going to be fined if you don't have it. So just for a random check of the car, in general if the portable breathalyzer is not there or is not in a functioning

state there's going to be a fine for that, so it's basically treated as the safety kit.

MEMBER WEENER: Now, what is the cutoff level for the BAC in the various parts of Europe? Is there a uniform standard in Europe or does that vary by country?

MR. STERIU: In terms of the legal limit?

MEMBER WEENER: The legal limit, yes.

MR. STERIU: It does change. If you can pull up my slide actually, the one just before Ireland. We are seeing several countries which simply have a zero BAC limit and -- I don't know if it's for cultural reasons or just general road safety reasons, mostly central European countries have a 0.0 limit, whereas western and northern Europe look mostly at 0.5.

MEMBER WEENER: I'm sorry. Was that 0.5?

MR. STERIU: Yes.

MEMBER WEENER: I can't read the chart, so --

MR. STERIU: 0.5, yes, sir.

MEMBER WEENER: 0.5?

MR. STERIU: Yeah.

MEMBER WEENER: Okay. Thank you. A question for Professor Watson. We heard yesterday that the random roadside tests often end up kind of clogging up the system. One example was you have seven officers and by the time you've found three with over the limit you've basically got to shut down and move on. But you've got a process in place for basically processing them on

site, is that correct?

DR. WATSON: That's right. It does depend across the states. Some states use those, what we call booze buses more commonly and they tend to be used more in the major urban cities. But that's the design and the purpose of them, so that if a driver is detected, rather than effectively needing to close down that particular operation, they are processed in the booze bus where the evidentiary test is undertaken, and then in effect, no one then has to come off the line who's doing the testing, so that's the real strength of that approach. But it is quite resource intensive, of course, so what does happen more often in a lot of states is that a lot of the RBT tests are done by cars.

Now depending on what the detection rate is at the time what can happen is that if they catch -- say if it's two or three officers doing that, if they catch a lot of drivers in quick succession effectively it does shut down the operation because they then have to transport them to the police station to undertaken the evidentiary test.

I guess the good news, though, is that the hit rate or the detection rate for drink driving in Australia is typically under 1 percent. Depending on where and how it's done, between 1/2 a percent and 1 percent, which means that they can still -- before they actually typically detect a driver they've done a lot of breath tests. But it is a resourcing issue that needs to be balanced by each jurisdiction as to how much breath testing they

do via the big booze buses versus car-based operations.

I should also note that there are in some jurisdictions they even, though, used -- for example, used what we call station wagons or bigger, larger vehicles, but not like a bus, where they'll have the evidentiary device in the back. So there are kind of hybrid models where you can have not necessarily the big bus but a smaller bus or even a station wagon vehicle equipped with the evidentiary device to enable the testing and the --

MEMBER WEENER: Very good. Thank you.

CHAIRMAN HERMAN: Member Sumwalt?

MEMBER SUMWALT: Thank you. Mr. Steriu, across Western Europe or the European Commonwealth, basically, what is the rate of all traffic fatalities, impaired driving consists of what percentage roughly? Is it about comparable to what we're seeing here in the United States?

MR. STERIU: As I said, it's somewhere around -- it's estimated to be somewhere around 25 percent of all the deaths. However, if you look at the actual attributes that are reported by the police which are attributed to alcohol, those only stand at 11 percent. But the estimate for the number of deaths in which alcohol was involved as a cause, whether primary or secondary, it's about 25 percent.

MEMBER SUMWALT: Okay. Thank you. I am interested in the breathalyzers that France is requiring to be in the cars. Basically I worry about the unintended consequences of that, that

basically you can have somebody who says well, the legal limit is -- what is the legal limit in France, .08?

MR. STERIU: Five.

MEMBER SUMWALT: .05. So somebody could sit there and say well, I'm only at .04, so I think I can have another glass of wine or something, and -- but this is a policy decision that the French government decided, but I do worry about that. As we learned yesterday, and I think this is a huge takeaway for me, is that any level of alcohol is impairing and we don't -- it's not just a 0 or a 1, that all of a sudden once we reach that per se limit then we're impaired, so I do worry about the intended consequences of this.

The calibration of these devices, I assume that they're not horribly expensive. They are expensive or they're not?

MR. STERIU: The portable ones are actually not expensive at all. They're kind of the same type that the police is using, so they're not particularly expensive.

In answer to your concern, well, of course, you will have people who are going to try to bend the rules, but if you do get caught, one glass of wine is going to add just a touch more than a 0.1, which is the difference, so --

MEMBER SUMWALT: Yeah. You know, I've heard this argument because you can go to a drug store here or a pharmacy and buy one of these kits and I've heard that argument, that there's a downside to it, the calibration isn't necessarily what it --

accurate and things like that. It might give a false sense of security there. So I was just curious about the unintended consequences of having a device where you could blow into it to see, well, I'm okay where in reality you're not okay. But thank you.

Mr. Watson, I think I missed this. Is the RBT used throughout Australia or just in Queensland?

DR. WATSON: RBT is used through Australia. It was progressively implemented from about the early 1980s. In fact, Queensland was one of the last states to implement it.

MEMBER SUMWALT: I see. Thank you. One of the slides said that 98 percent of the citizens supported the RBT or something along those lines. Do you recall what the sample size was of the surveys?

DR. WATSON: Yeah. They're telephone surveys from a memory of around 1,500. Having said that, though, the same has been shown in other studies as well. In fact, there's another study where we administered a questionnaire to people in drinking venues, and even people who admitted to drinking and driving still supported random breath testing. I suspect their thinking was that they were fine after drinking, but RBT is a good thing to have for everyone else.

MEMBER SUMWALT: Yes. We see the same thing when it deals with distracted driving. People will say that they strongly do not think you should text and drive and yet they do it

themselves, so we see the same sort of behavior. Madam Chairman, I have no questions -- no further questions.

CHAIRMAN HERSMAN: Member Rosekind?

MEMBER ROSEKIND: Can you each give us a sense for some of the very effective things that you've been talking about, what time course was just to get them implemented and then how long before you started seeing some of the significant changes you've showed us?

MR. MARTIN: We actually started to see a significant change overnight. We track fatalities on a monthly basis. It's delayed by 2 months. And the first few months we saw a 50 percent reduction in fatalities compared to similar periods prior to implementation. And we've seen that just decrease slightly over the year, but it's now at a sustained level of over 40 percent. Despite the fail range sanctions being put on pause temporarily we're still tracking about 40 percent.

DR. WATSON: In the case of random breath testing the results were so immediate that, in fact, they hit before it was actually implemented, and that was attributed to the fact that there was a lot of publicity and controversy about the move. And I know particularly that the state that did it in the most 'boots and all' kind of fashion, which was new South Wales, that the evaluations do indicate that it was introduced in December, around Christmas time, and that the alcohol-related crashes were starting to decline in the month before that, so it did have an immediate

impact, but it was a very specific measure. And I'd argue that it took a while to get to random breath testing and, in fact, in the case of the different states the ground was kind of laid by those states that went before.

So in the case of, for example, Queensland we came right at the end of the process, but we were able to implement mobile RBT right from the beginning because there had been a debate in the other states that at first it was only allowed to be in stationary mode, but then they did an evaluation of -- so it was originally stationary. Then they did an evaluation of the mobile mode. So by the time we able to implement it we could go straight to the mobile as well as the stationary right at the beginning.

MR. STERIU: In terms of the alcohol interlock project in France, it was a project which lasted for 4 years and it was tracked throughout -- it was tracked at the end of the project basically. The interlock device was offered as an optional, and the sample of the drivers who did choose it was compared to the, I would say, control group of those who didn't.

MEMBER ROSEKIND: Can you say anything from your experience about any data needs that you see out there? You know, one of the challenges we've had here that was discussed yesterday is you find alcohol, you don't go for the drugs, for example, so given that as an emerging problem and generally estimates about, you know, what the percentages are can you just say anything about where the data needs are still to understand the issue and

effectiveness of what's going on?

DR. WATSON: Well, certainly in the Australia perspective the variation in the testing for alcohol among fatalities does vary a bit across the states and, of course, can be better, but certainly in the case of injuries, not everyone who's injured in the crash will be tested.

The big one that you've already mentioned is that at the moment in our random stopping programs for drug driving, if the -- it's only the drivers who passed the breath test that then we do the drug test on, and that's as much a resourcing issue and also a decision based on the fact that they've already been caught for drink driving.

However, what it means is that there's a group of offenders who aren't being identified who've got both alcohol and drugs in their system, and we know from various studies that they're the group that probably have the highest crash risks on the road and, arguably, we need to identify better, particularly if we want to in the future have better sanctions or rehabilitation programs for those particular offenders.

MR. MARTIN: In our jurisdiction we know that over time 30 to 40 percent of fatally injured drivers tested positive for drugs. One of the key pieces of business intelligence that we don't actually have, and this is very important, is that we need to examine the role that the presence of drugs actually played in the crash. You know, we don't have that hard evidence yet, and to

be able to formulate legislative responses and recommendations we need -- we just need that further intelligence.

MR. STERIU: For Europe, one of the biggest issues that we have is creating a common reporting procedure and common definitions, first of all, of what is an alcohol-impaired death within all the member states so that we can compare actually the numbers rather than the percentage decreases for each member state.

MEMBER ROSEKIND: All right. Thank you.

CHAIRMAN HERSLER: Vice Chairman?

VICE CHAIRMAN HART: Thank you. I heard in one of the presentations and, unfortunately, I noticed that I didn't write which presentation I heard it in, but there was a reference to mandatory sanctions, and then the further reference was and it didn't go through a judge. Who was it that -- was that you, Mr. Martin?

MR. MARTIN: That would be British Columbia.

VICE CHAIRMAN HART: Okay. Could you explain how that works when you say mandatory, i.e., not -- it sounds like no -- there's no court involvement in the process.

MR. MARTIN: Yes. Our approach was on the basis of a provincial law as opposed to utilizing Federal Criminal Code sanctions. We have had the ability to put in place administrative sanctions for decades. What we've done is that -- we've really just started to use them in a much different and more pervasive

way. The courts have consistently found in terms of provincial law that -- driving is a privilege, it's not a right, and with that privilege driving is seen as a heavily regulated area and within provincial jurisdiction, in the context of protecting public safety and regulating drivers we've been able to do that in an administrative process.

VICE CHAIRMAN HART: So does that literally mean that on the spot the person who is above the legal limit loses their license right there and has to find another way home or how does that work?

MR. MARTIN: I think the enforcement are kind enough to call a taxi or often that person will get a ride with the tow truck driver who's towing their car and impounding it for 30 days.

VICE CHAIRMAN HART: And is there any possibility to challenge that procedure after the fact or how does that work?

MR. MARTIN: Yes. We have a well-established administrative judicial process where independent adjudicators conduct hearings and people appeal. We have an appeal rate of about 10 percent and about 16 percent of those are found in favor of the driver, so it is a very comprehensive process and well recognized in law and tested through the supreme court of Canada.

VICE CHAIRMAN HART: And how many provinces have it?

MR. MARTIN: Most provinces have that.

VICE CHAIRMAN HART: Thank you. That's very helpful.

Dr. Watson, I'd like to ask you about what you said

about Australia mentioning -- one of your slides said Australia does not use fiscal policies to any large extent to manage alcohol use. Does that mean taxes on the purchase and -- fiscal policies like -- is that what you meant by fiscal policies?

DR. WATSON: Yes. We do -- there is some differential taxation based on alcohol, so our low alcohol beer is cheaper than the full strength beer. But when I compare it to how I think other jurisdictions around the world use taxation policies I think we could be more aggressive in that area.

VICE CHAIRMAN HART: Okay. Thank you. And one last question for any of you who were here yesterday and heard the whole presentation and have heard what we have in the U.S. versus what you have, similarities, differences, I'd be interested if you have any thoughts or suggestions on what we can do here in the U.S. to help get us off this plateau that we've everybody talk about. Yes, please.

MR. STERIU: If you don't mind, I would look at the administrative sanction system which in one form or another we have all mentioned, and this would definitely increase the swiftness of the punishment that can happen. I mean, frankly, for me, if you have the option of going to court and only losing your license 6 months after you were caught drinking and driving that's not swift enough for me.

DR. WATSON: I'd like to emphasize two things in particular. First of all, the move to a lower BAC limit, so

evaluations in Australia, and I know from elsewhere around the world, do show benefits of going from .08 to .05. Secondly, I realize that there are constitutional barriers or perceived barriers in the United States to move towards random breath testing, but our results in Queensland certainly show that when we went from a random stopping program, which looked like your sobriety checkpoints to random breath testing, we got a further improvement. And I guess it comes down to whether -- in light of more recent arguments whether there is that impediment to the random breath testing in the USA.

MR. MARTIN: And from my perspective pay close attention to behavioral intervention and the immediacy of the sanctions and the severity of the sanctions. Vehicle impoundment has proved effective people hate losing their stuff. People also don't like to be inconvenienced. They don't like their car towed away and have to find another mode of transportation, so I would pay attention to that. I'd kick the tires on random breath testing, and I'm also very encouraged by a previous presenter on the future of in-car alcohol detection systems. I think humankind has proven to be rather frail, and I think that we can only change behavior to a certain point and then we're going to have to look to technology to take us that step further.

VICE CHAIRMAN HART: Okay. Thank you. That's very helpful. And thanks to all of you for coming such great distances, especially in the case of Australia, to be here to help

us. Thank you.

CHAIRMAN HERSMAN: Thank you. We're running a little bit behind and I think I'll let you all close on those comments that you gave to the closing chairman from -- questions from the Vice Chairman. I think that was very helpful, to give us a bird's eye view of what's being done around the world.

Thank you so much for traveling to be with us, and we have your presentations and I think they'll be very helpful to us. I do think there are some differences. I did -- and the question about when can people drink in Europe, and I did spend 6 years growing up in Europe from when I was 11 to 17 and, yes, we may have been able to drink, but no one in my high school could drive, so the driving ages are little bit later and the barriers to getting a driver's license are much more significant in Europe.

I want to thank all of you all for being here, and I thank our staff for putting together such a great panel and getting you all to come and share your experiences. We certainly know that there are many successful paths to trying to address this issue and we appreciate learning from your experiences.

We're going to break for lunch and we are going to be changing the seating arrangements in the room because we have quite a big group this afternoon, and so once we leave our staff will be doing that, but I want to make sure that you are aware of a couple of special events planned for today.

We won't be coming back in until 1:15, but we have

actually some outdoor events today planned on the plaza. The D.C. Metropolitan Police will be here, and also Volvo will be here and they've got some hands-on demonstrations with some technology to address substance-impaired driving. Volvo's going to show their Alcoguard and the D.C. Metro Police will let you take a close look at one of their breath alcohol testing or BAT mobiles.

In addition, police officers can demonstrate some of the procedures that we've heard about in the past couple of days, like a standardized field sobriety test and a DRE exam. So if you think that you can pass, I encourage you to go up and take some of those tests during lunch.

Our NTSB staff are going to be stationed outside the conference room and upstairs to show you where to go. When we resume after lunch we have a special guest speaker, the Honorable Gil Kerlikowske, who is the director of the Office of National Drug Control Policy, also known as the White House drug czar. We will begin at 1:15 and he will start off the afternoon session by talking about his goals regarding drugged driving. We stand adjourned until 1:15.

(Whereupon, a lunch recess was taken.)

A F T E R N O O N S E S S I O N

(1:15 p.m.)

CHAIRMAN HERSMAN: Welcome back. We are privileged to start our afternoon session with remarks from the Office of National Drug Control Policy Director Gil Kerlikowske. The ONDCP advises the President on drug control issues, coordinates drug control activities and related funding across the federal government and produces the annual national drug control strategy which outlines the administration's efforts to reduce illicit drug use, manufacturing and trafficking, drug-related crime and violence and drug-related health consequences.

In 2010, President Obama's inaugural National Drug Control Policy included the first ever goal to reduce the prevalence of drugged driving by 10 percent. Before taking the lead at ONDCP, Director Kerlikowske had a long and distinguished career in law enforcement. He most recently served 9 years in the Seattle Police Department in Seattle, Washington and when he left crime was at its lowest point in 40 years.

Previously he was deputy director for the U.S. Department of Justice, Office of Community-Oriented Policing Services, where he was responsible for over $6 billion in federal assets. Director Kerlikowske was also a police commissioner in Buffalo, New York, and the majority of his law enforcement career was spent in Florida where he served in the St. Petersburg Police Department.

Director Kerlikowske was elected twice to be president of the Major Cities Police Chiefs, which is comprised of the largest city and county law enforcement agencies in the United States and Canada. And he was also elected president of the Police Executive Research Forum. He has received numerous awards and recognition for his leadership, innovation and community service, most notably the American Medical Association's Dr. Nathan Davis Award for outstanding government service in 2011.

In addition to all of these activities, he also served in the U.S. Army where he was awarded the Presidential Service Badge. We're honored to have Director Kerlikowske with us today. Gil.

MR. KERLIKOWSKE: Well, thank you, Chairman Hersman. I can't tell you how delighted I am and absolutely honored I am to appear in front of you and to discuss this issue of drug driving, and how very appreciative I am also of the interest that you all have shown in this particular issue.

You know, the country has received -- has been the beneficiary of significant reductions in alcohol-impaired or drunk driving for a whole host of reasons and, having almost 40 years in law enforcement, I think it's truly as a result of the partnerships and the collaboration, the leadership that has been developed by community organizations, particularly Mothers Against Drunk Driving, but also really forward leaning legislators, law enforcement personnel, et cetera.

And, believe me, I am well aware and understand fully that we have a lot more work to do in that particular area, but I think that analogy is particularly appropriate to the issue that I want to talk about this afternoon. We're familiar with the incredible consequences and the toll that alcohol-impaired driving and driving with the different distractions has taken in lives lost, in injuries, in insurance rates and on and on.

We have been working closely with the Department of Transportation, and specifically NHTSA, along with other federal partners, and our office, ONDCP is really a very small office, but I think what we pride ourselves on is developing those collaborations, bringing people to the table, and then working on these issues together in a way that -- we're not particularly interested in who gets the credit and how the turf issues are all aligned. We're actually interested in seeing how the work gets done and how we can make some accomplishments.

In 2010 we saw the results of the first ever analysis of drug-related data from NHTSA in the FARS data, the Fatality Analysis Reporting System, where the nationwide census shows that one in three drivers killed in a motor vehicle crash in 2009 who were tested with a known drug tested positive for an illegal drug. Further analysis of the FARS data suggests younger drivers are especially affected by the dangers of drug driving. Drivers under 35 represent 46 percent of all drug involved fatally injured drivers while they represent only 40 percent of all fatally

injured drivers.

And as I discuss the data I know that all of you are well aware of not only the lags in the data, but also the deficiencies, and we, along with our other federal partners, could not be more committed to improving the system so that we can advise on policy so that people can look at legislation based upon the most timely and the best available information.

Cannabinoids were reported in almost half of the fatally injured drivers aged 24 or younger who tested positive for drugs. And from the 2011 Monitoring the Future study -- this is a study, by the way, a survey that's been done by Professor Lloyd Johnson for well over 30 years surveying eighth, tenth and twelfth graders about drug use. Monitoring the Future, we know one in eight high school seniors reported that in the 2 weeks prior to taking that survey interview that they had driven after smoking marijuana. More then reported driving after consuming alcohol.

And it's clear that drugs have an adverse affect, as you well know, on judgment, motor skills, reaction time, all the necessities that are so critical to driving responsibly and for driving safely, and we need to apply the same grassroots focus, my opinion on this, and the advocacy that has been proven successful with alcohol-impaired or drunk driving to prevent the drug driving issue, and I think prevention is one of the key efforts.

You know, it's been nearly 2 years since President Obama identified drug driving as a national priority in his 2010

national drug control strategy, and it set an ambitious goal of reducing drug driving in America by 10 percent by 2015. Well, in those 2 years I think we have made a lot of progress in tackling this issue.

And I think my other analogy would be around the area of prescription drugs. Up until about 3 years ago the prescription drug issue and drug overdose fatalities now take more lives in our country than the lives that we lose due to gunshot wounds and now, of course, the lives that we lose just to driving crashes, fatalities. Prescription drugs just hadn't been on the radar screen or in the public's vocabulary, very similar to the way that -- the drug driving issue, but through forums such as this and many others and the partnerships I think we're getting that message out, and I do think some real progress has been made.

In his 2010 and 2011 drug controls he declared December National Impaired Driving Prevention Month and he called on all Americans to commit to driving sober, drug-free and without distractions.

This past October, leaders in youth prevention, highway safety, law enforcement, government research from more than 40 diverse organizations gathered at our offices to talk about this at a drug driving summit and to take stock of where we are in our efforts and, more importantly, where we need to go. And at this event I could not have been more proud to have a partnership with Mothers Against Drunk Driving, an organization that seeks to stop

drunk driving and ONDCP announced along with them this unprecedented partnership which I think is particularly important because as a long time law enforcement effort I give so much of the credit to the work that they have done.

Well, MADD and ONDCP agreed to raise public awareness regarding these consequences of drug driving, and with underage driving -- with underage drinking, drug abuse and other unsafe behaviors, prevention again is the most important tool. And that's why the National Youth Anti-Drug Media Campaign, our campaign called Above the Influence, released a drug driving toolkit to assist parents and community leaders with drug driving prevention.

A few of you in the room are certainly old enough to remember some of our earlier media attempts, this is your brain on drugs, and it would have two fried eggs, et cetera. We have a much more up to date and a peer-reviewed and tested media campaign that really shows that young people who have been exposed to these ads are more resistant to using drugs. And I would just caution you that if you go to our website and look at those ads, don't call me up and say I don't get it because, frankly, the ads aren't for your age. I just --

Well, we're here to day because we're really dedicated with so many people in this room to improving road safety and saving lives. And it takes a lot of energy and dedication to do that, and I'd like to take the opportunity to collectively assess

and discuss the other areas that we're working on in this particular problem and how smart public policy can make our roads safer and what we can do as parents and community members to educate and prevent drug driving.

We've made significant strides since the President's goal of reducing drug driving by 10 percent. It was announced. And, first, we needed to work together to raise public awareness, and I think we're doing that, our other partners in the room, NOISE, RADD, et cetera. Most of the effective ways to combat drug driving is through parents and these adult influences, community groups, others who are working across the nation to educate young people.

Research shows that parents are an incredibly powerful voice, and whenever you don't think that young people are actually listening to their parents they really are and they pay attention. And, you know, as long as that message comes from a trusted messenger, a coach, a law enforcement officer, a parent, a teacher, et cetera, and it's a well tested message, I think it makes -- well, we know from the research that it makes a significant difference.

Our drug driving toolkit is an excellent resource. The legal response is to get drugged drivers off the roads, and states are pursuing enhanced legal responses such as per se laws that will make it easier to keep those drivers off the roads. Well, 17 states in this country already have those statutes.

And, as you know, from listening to the discussion Around the World on this particular issue, the sanctions can often be much greater in other countries and, frankly, I think other countries have taken this a bit more seriously and they've brought this issue forward to reduce the problem on their roads.

We need to improve standards and reliability for drug testing. We're very much behind in the tools and the technology that law enforcement needs to combat this issue. We need the development of reliable and widely available roadside tests. We couldn't be more proud of the leadership that Secretary LaHood is showing in this particular instance in holding summits, in looking forward to an additional roadside test that will be underway earlier than those, so we begin to have the data and develop a baseline about what's going on.

We want to see more complete and consistent testing of the fatally injured drivers in all states, and I think, as you well know, the medical examiner system or the coroner system in states varies widely.

We also know that many of these labs are under fiscal stress and it's expensive and it's time consuming to test for these drugs, but if we're going to make proper, high quality, good decisions about improving road safety from the aspect of the drug driving issue we really need to have that kind of information.

We've worked hard to reduce this problem and we're not going to be satisfied until reductions in drug driving are as

steep as we've seen in other improvements in road safety.

I hope that I've left some sufficient time to engage with you in questions or discussion around this. I think it bears the point that the collaborations and the partnerships about awareness and education and prevention and technology, all of the things that worked so well to make improvements in reducing alcohol-impaired driving, all of those same kinds of things can work very well, I believe, to reduce the problem of drug driving.

I really thank the Chairman and I thank the members for their time today, for your dedication and your interest in this issue, for holding this summit and this discussion, and I look forward to working with you in this area, so I very much appreciate the discussion, the dialogue, the questions. Thank you.

CHAIRMAN HERSMAN: I'm going to turn to Member Rosekind first since this is his particular advocacy area to being the questions.

MEMBER ROSEKIND: First, thank you so much for joining us. And yesterday we actually acknowledged it was National Police Officers' Memorial Day, so we're going to thank you for that service, too, because we've pointed out that without having people on the street identifying these folks and getting them in the system for alcohol or drugs we wouldn't even be talking about interventions, et cetera, so we thank you for that.

I have two questions, pretty focused. One, we've

learned that we don't have, as we do in alcohol, sort of a .08 equivalent for the thousands of drugs that are out there. Do you have any thoughts about where we should be on sort of a per se or some other criteria to deal with the problem now rather than, say, wait for the research that will be needed to come out with that kind of equivalency?

MR. KERLIKOWSKE: I think the key in two areas for us would be, one, we strongly support the per se laws. We understand that certainly the science is behind in developing levels of impairment given the prescription drug issues that are out there, the changes in potency of marijuana, et cetera. Per se laws to me seem to make the most sense right now, and I think that will be important.

And, of course, the other part is the technology, the amount of time and training that it takes for a police officer to become a drug recognition expert. We certainly know that DUI attorneys are some of the most highly paid and one of the most lucrative fields of criminal defense practice, and even with the science of blood alcohol and breath analysis we really end up relying so much on that individual law enforcement officer's testimony. So the expertise that they can gather eventually, I hope, bolstered with the technology for review of the problem that the person is suffering from from behind the wheel will be a big help in moving this forward, but I think for right now per se laws are absolutely the answer.

MEMBER ROSEKIND: This is a little larger conceptual one, and the NTSB -- our primary product really are safety recommendations, so we don't create regulations, we don't enforce them, but we have a very large group that we apply those recommendations -- send them to. So can you give us thought or guidance? You know, within this area, alcohol, and specifically the drug driving, do you have any thoughts about where NTSB focus would be best placed?

MR. KERLIKOWSKE: Well, I know from my colleagues in law enforcement, but also prosecutors and others around the country, that there are fiscal stress issues because unless there's a fatality or a serious injury involved in these cases these are going to be essentially misdemeanor cases. They certainly can receive punishment and fines, but I think that the recommendations for the support that local tax dollars are needed for something that is not only very important when it comes to saving money as a result of reducing drug driving crashes, but is also critically important to saving lives and reducing, frankly, the costs of medical coverage for some of these areas.

So your support -- I mean when I read and listen to and clearly see the amount of coverage that the National Transportation Safety Board recommendations acquire across the country, I mean your voices are so incredibly powerful. People pay attention and they listen to them because, you know, it's a voice of reason and it's a voice that is one that helps people

understand that your goal is to save lives and make people safer.

MEMBER ROSEKIND: Thank you, sir.

CHAIRMAN HERSMAN: Member Sumwalt.

MEMBER SUMWALT: Director Kerlikowske, thank you for being here, and you just pointed out that the NTSB does have a strong bully pulpit, so what would be one or two things that we can be doing to help push this -- move this needle in the right direction?

MR. KERLIKOWSKE: Well, after helping those state and local officials, and I know people are here from the U.S. Conference of Mayors and others, helping them understand that that investment can actually -- in reducing the problem can make dividends. I think the other important part is the awareness.

So I had mentioned earlier that analysis. When I was going through preparation for confirmation it was brought to my attention about more people dying from drug overdoses than dying from gunshot wounds. Look, I paid attention as a police chief to things that hurt people in my community, so if it was pedestrian crashes, if it was alcohol-impaired driving, if it was robberies, et cetera, I mean I really felt that I looked at the data and wanted to make sure I was putting strategies in place to protect people from things that hurt them.

When I was told well, you do know that this is killing more people than gunshot wounds I did not know that and freely admitted it, but then I went back and tested all my friends and

colleagues and, frankly, they didn't know it either. And, sure, experts knew it, physicians and people in particular specialties that are affected by the prescription issue, but, frankly, a lot of the public didn't know it.

And I would tell that I think this drug driving issue is exactly that type of thing. We're making real progress on the prescription drug front. I think that as we build awareness and understanding and certainly through the work that you all do we'll make a huge difference, so supporting those use of local tax dollars and bringing awareness to the problem. I mean when young people are more concerned about not getting behind the wheel with somebody who's had alcohol or themselves, but don't seem to show, as the research tells us, that it's a concern after having smoked marijuana, you know, in my old job I'd call that a clue.

MEMBER ROSEKIND: Thank you very much.

MR. KERLIKOWSKE: Thanks.

CHAIRMAN HERSMAN: Member Weener.

MEMBER WEENER: Well, we share a little bit of background. I spent a number of years in Seattle as well, and so I suspect that you have just missed the gray season --

MR. KERLIKOWSKE: Yeah.

MEMBER WEENER: -- and summer's about to start.

MR. KERLIKOWSKE: July 4th or July 5th, I think, is usually --

MEMBER WEENER: Yeah, and you're probably aware that

most people try to take the same 2 weeks in July off in Seattle.

MR. KERLIKOWSKE: Yeah.

MEMBER WEENER: Yeah. We earlier today heard from the international side, in particular the European Union, and they seem to have a remarkably consistency between the states, at least more so than I would have expected, but I think we in the United States have as much of a problem in trying to get consistency between the states. What are your thoughts about how we can get better consistency on both the drugged and the drinking issues?

MR. KERLIKOWSKE: Well, I think they'll take it -- it's not the -- I don't want to say more seriously. I think they'll pay more attention to this issue in that the states, particularly in the legislature, will have more emphasis and focus on this as it bubbles up to the top.

You know, I've often heard that elected officials will follow when the public leads, and I think that as the public brings this to greater and greater intention I think that you'll see these legislatures make that difference.

I think for some of them, particularly the states that have passed medical marijuana laws, that there is a real level of concern about how to put the drug driving issue into that box and to kind of then disentangle them one from the other.

But, you know, it's not a -- you know, smoked marijuana is not medicine. It has never been through the FDA process, and we have a world renown process for determining what is medicine,

and we know from the research that getting behind the wheel with marijuana is an impairment. It's a significant problem. So I think that you will make a huge difference just by the mere fact that you've held these 2 days of very intensive discussion and brought in some of the foremost experts.

MEMBER WEENER: And thank you for joining us.

MR. KERLIKOWSKE: Thank you.

CHAIRMAN HERSMAN: Vice Chairman.

VICE CHAIRMAN HART: Thank you, and, Director Kerlikowske, I would add my thanks to you for joining us and Member Weener's question was kind of a segue into what I'd like to ask based on what we heard today, which is to what extent do you see opportunities to exchange notes with other countries regarding what worked and what didn't work in those countries to help us not make the same mistakes and figure out the best way to get from where we are to where we want to be?

MR. KERLIKOWSKE: One of the things that we did early on when we began discussing this with other federal agencies here was to -- well, we put together a resolution for the Commission on Narcotic Drugs that the United Nations holds once a year in Vienna. And, frankly, I was interested on the resolution to see, one, how many other countries we would get as signatories.

And then when we held a public discussion in Vienna on the issue as part of the United Nations Office of Drugs and Crime, the CND meeting, how many people would show up, and we had about

114 in the room, which was pretty amazing. So it also right away told me that not only is this a significant problem in other countries, but that other countries were also working. So being smart about this, collaborating with them, I think makes sense.

And then we were fortunate that our DOT and Canada, that we were able to hold the first international conference. I think that some of the countries that you have heard from are further ahead in the development of some of the testing. I think that strong sanctions are needed just as the strong sanctions are in place in almost every state for alcohol-impaired driving, and so I couldn't agree with you more.

Sometimes that parochial attitude of, you know, this is just a problem here within our United States and on our national highway system is a mistake. I think we can work with and collaborate with other countries. Thank you.

VICE CHAIRMAN HART: Thank you and, again, thank you for coming.

CHAIRMAN HERSMAN: Director Kerlikowske, I know I've been with you at other events and I've heard you mention that marijuana is a huge issue. If we were to look at identifying testing that would need to be done perhaps at the roadside trying to identify drugs in the future as the tests become more sophisticated, what drugs do you think are most important to test for?

MR. KERLIKOWSKE: Right now I think the research shows

the marijuana coming back in the FARS data and the others. I think we also need to also, you know, know that, of course, the marijuana, it's going to stay in the system longer and come back so that the tests coming back don't necessarily reflect a particular level of impairment.

And so our drug use in the country -- and we're often asked what's our national drug problem and we actually have a series of regional drug problems, so methamphetamines is a particular problem in the West. In the Midwest prescription drugs seem to be overshadowing a lot. And I'm thinking, more importantly, around -- not more importantly, but I'm thinking more around the area of the opiate pain killers that are widely attributed to much of our prescription drug problem, the marijuana issue.

And then, just like so many complex problems, we have those combinations of drugs and those combinations of drugs with alcohol. But I think we could easily help determine from development of the technology the three or four particular drugs that would be most applicable to technology and to testing.

CHAIRMAN HERSMAN: Okay. So when we talk about the prescription drugs it sounds like opiates and the painkillers right now are the ones that are your radar screen?

MR. KERLIKOWSKE: They are. They're very much leading to the number of overdose deaths and they are also leading to a very high number -- I think for every death there are seven

emergency department overdoses due to these prescription painkillers.

CHAIRMAN HERSMAN: Okay. And then on the goal of reducing the number of drug driving events by 10 percent, one of the challenges that we are seeing is that the data really is not good, and so one of the -- I think one of the confounding issues for measuring whether or not you meet your goal or achieve your goal is if we actually go get better at the data collection the numbers are going to change on you and you're going to kind of be measuring a different set than when you started out. So can you talk to me a little bit about what we need to be doing when it comes to data and how you're going to measure success?

MR. KERLIKOWSKE: When we were first briefed by Dr. Michael and others about the roadside testing done in 2007, you know, as part of that roadside survey -- I think that is done about every decade.

We were able to work closely with the Department of Transportation to speed that up by half, so that -- because all we have basically right now is a baseline, and what we need to do is to have a second measure, and I believe the Department of Transportation can talk about where that second roadside survey is underway, and I think that that will be most helpful.

But I also think that your support for more work at the state level by medical examiner and coroner systems, particularly every person that is killed in a car crash, the driver of a

vehicle, that there should be testing, and we know that in some states there is not as much testing as in others, and that really leaves, again, a lack of granularity to the particular data, so I think that that's important also.

CHAIRMAN HERSMAN: Thank you so much and thank you for giving us some time for questions. We really appreciate your leadership on this issue and we look forward to working with you as we move forward.

So we are going to switch panels and, as we're inviting our next panelists to come up, Mr. Blackistone is going to be making introductions, so we'll switch tables. Steve?

MR. BLACKISTONE: Great. Thank you very much, Chairman Hersman.

Just as a reminder for our panelists, you'll need to push the button on the microphone and a green light will indicate if the microphone is on or not. Please bring the microphone close to you and be sure to turn if off when you're done speaking so that we don't have feedback. We thank you for that.

Our final panel today brings together representatives from government, advocacy organizations, industry and other key constituencies to discuss the practical concerns and actions that are needed to eliminate substance-impaired driving.

Each speaker will have 5 minutes to provide an opening statement. We'll then proceed to 20 minutes of questions from the Technical Panel. Then we'll take a 30 minute break and return for

questions from our Board members.

We anticipate that there will be some back and forth dialogue among the panelists, many of the questions today, but given the size of the panel, we ask you to try and keep your remarks brief so that others will have an opportunity to respond as well.

Before we start, let me introduce Ms. Jacqueline Hackett from the Office of National Drug Control Policy. She will not be providing an opening statement but, rather, will be prepared to answer questions on behalf of Director Kerlikowske.

And, with that, we'll begin our opening statements, and our first speaker is Mr. Ralph Blackman from the Century Council. Mr. Blackman.

MR. BLACKMAN: Thanks, John. Chairman Hersman, Vice Chairman Hart and members of the Board, I'm Ralph Blackman. I'm the president and CEO of the Century Council.

We're a not-for-profit organization founded 20 years ago to fight drunk driving and underage drinking. Our funders are Bacardi U.S.A, Beam, Brown Foreman, Constellation Brands, Diagio, Hood River Distillers and Pernod Ricard USA.

The good news is that drunk driving deaths are down 52 percent since 1982, but these numbers conceal a persistent problem, the hardcore drunk driver. These are offenders who drive at BAC levels of .15 or above, or they do so repeatedly as demonstrated by having more than one DWI arrest, and they are

highly resistant to changing their behavior despite previous sanctions, treatment and education.

High BAC drivers are involved in the majority of impaired driving deaths each year, a trend that has remained relatively unchanged for more than a decade. About one-third of impaired driving deaths involve repeat DWI offenders. However, that's based on NHTSA's 3-year look-back period, not the 10-year look-back period for repeat offenses favored by the Council or the majority of states which have adopted look-back periods ranging from 5 years to lifetime. Some estimates suggest it may be closer to two-thirds.

Our national progress, though impressive and important, has mainly succeeded in deterring the general public who tend to respond to traditional sanctions and education efforts. Meanwhile hardcore drunk drivers often slip through the system. They know the escape routes such as BAC test refusal, failure to appear, and not complying with their sentences.

If were are to reach zero and eliminate substance-impaired driving we must understand the impact of hardcore offenders. It is a fact that hardcore drunk drivers are more aggressive, hostile and thrill seeking. They are more likely to have criminal records, use drugs and have poor driving records. And it is a fact that multiple DWI offenders have a high rate of substance use and mental health problems such as Post Traumatic Stress Disorder, depression and anxiety.

Our national must now implement comprehensive solutions. Innovative use of technology has become the countermeasure du jour in recent years and, though it may be conditionally effective, the nation must not rely solely on it.

Research shows that once the technology is not in use the hardcore offender begins to recidivate. As such, we offer the following five priorities for your consideration:

Behavioral Change. Combine technology with efforts to change behavior. Assess the offender's problem in the pre-sentencing process when possible and treat the disorders while protecting the public.

Supervise Offenders. Hardcore offenders manipulate the system. Effective supervision and adequate resources to conduct it are absolutely essential.

Education. DWI cases are among the most complex criminal cases to adjudicate. Continued education for criminal justice practitioners is critical to future progress.

An Individualized Approach. Individualized sentencing and rehabilitation must be a priority for hardcore drunk drivers as they often exhibit a number of co-occurring disorders.

And Better Data. We need a more accurate measure of the problem in order to focus on better solutions. State data on fatalities, arrest and injuries is incomplete, and as safer cars and safer roads may also lead to fewer deaths, we should be exploring whether fatality statistics alone are still the best

measurement upon which to base policy decisions.

So what can the National Transportation Safety Board do to reach zero? First, use the NTSB's bully pulpit to keep impaired driving as a top priority for the traffic safety community and the American public.

Second, expand your recommendations beyond legislative goal to pave the way for behavioral change by supporting initiatives such as comprehensive offender assessment and treatment, intensive supervised probation, additional DWI courts, innovative programs tailored to community needs.

And, third, the NTSB can be the national leader in the study of impaired driving by convening other federal agencies and coordinating their efforts to identify science-based solutions.

In closing, we've accepted your challenge, as I hope others will, to provide you with our recommendations per the title of this forum which is Reaching Zero, not fighting drunk driving, but Reaching Zero, actions to eliminate substance-impaired driving. The Century Council commends you for this effort and thanks you for your leadership.

MR. BLACKISTONE: Thank you, Mr. Blackman. Next we'll here from John Bodnovich, American Beverage Licensees.

MR. BODNOVICH: Thank you, Steve, and good afternoon, Chairman Hersman and members of the Board. My name is John Bodnovich. I'm the executive director of American Beverage Licensees. I'd like to thank you for this opportunity to appear

before you today on behalf of ABL regarding substance-impaired driving.

American Beverage Licensees is a trade association of nearly 20,000 small business owners who operate independent bars, taverns and package stores in cities and towns across the country. ABL members are active in their communities, contributing to their local economies and the civic fabric of their hometowns.

Before I go any further, I'd like to applaud you for including members of the beverage alcohol community and, in particular, independent beverage retailers in this forum.

The first of many actions required to effectively address this problem is to bring all stakeholders to the table. Beverage retailers are already engaged in state and local level policy discussions concerning drunk driving and hope that they may be part of the solution to better protect their communities from drunk drivers.

I was asked to talk about what I thought was the single most important thing that could be done to reduce impaired driving and fatalities. From the start of this forum a number of people have stated that there is no silver bullet to the problem of drunk or drug driving and I couldn't agree more.

I can share the perspective of independent beverage retailers and one initiative that we are engaged in to make sure that we are doing what we -- the beverage retailers are doing what they can do be responsible purveyors of beverage alcohol and,

thus, positively engage in the first against drunk driving.

Beverage alcohol retailers and their staff are often faced with complex situations when dealing with potentially intoxicated customers. Questions can arise. Is the person intoxicated or disabled? Is the person taking either over-the-counter or prescription medication that's affecting their demeanor? Is the server or bartender scared of confrontation? Did the person enter a bar or tavern already intoxicated? And, more to the point, how is public intoxication defined and identified. As has been noted by others during this forum, the signs of intoxication can vary greatly depending on the individual and their tolerance.

For on-premise establishments licenses to serve alcohol managing and controlling alcohol consumption can be challenging and staff training must be comprehensive and ongoing. On-premise establishment must also be attentive to the overall environment, preventing over-service and dealing with customers whose intoxication represents a danger to themselves and others.

That's why ABL has partnered with the Responsible Retailing Forum and its supporters to develop responsible retailing practices for on-premise alcohol serving establishments. This guidance is an examination of policies and practices that guard against unlawful alcohol sales, including over-service to intoxicated individuals, and serves as a primer for protecting the safety and well-being of the community while making licensees and

their staff aware of potential liabilities and fines.

ABL has promoted this guide and made it available to its members, and this has coincided with our continued emphasis on the fact that on-premise beverage retailers provide and sell an experience, the camaraderie of the on-premise setting and environment, not just alcohol. After all, beverage retailers have an economic incentive to abide the law with a safe business to keep their doors open as opposed to acting irresponsibly and losing their license and their livelihood.

ABL members also continue to support server-training programs that give retailer and their employees a baseline skill set for being responsible retailers. This adds another tool to the toolbox to prevent drunk driving, which leads me to an observation.

We as stakeholders need to recognize and use all the tools in our toolbox. That means recognizing that technology alone, even if mandated by the federal government, is not going to be successful in the long-term if implementation rates remain as low as they are today.

It means appreciating that the criminal justice system, DUI courts, prosecutors and judges have an important role to play and their wisdom shouldn't be minimized in favor of probation policies that drain resources and attention from probation and parole professionals.

It means including assessment and treatment in the

equation so, as someone put it yesterday, we are not simply warehousing offenders and only treating the crime and not the individual.

It means that we see over-the-counter and prescription drug abuse -- as we see over-the-counter and prescription drug abuse become more commonplace we must develop better testing for multiple substances so we can continue to grow our understanding of the prevalence of drug driving versus drunk driving.

And, yes, it also means understanding that more needs to be done if we want to talk about changing the culture when it comes to drink driving, and many of those conversations need to start with the servers and customers at our eating and drinking places where much of our culture is defined.

If we are to be successful, however, we must also acknowledge that there are millions of Americans who use beverage alcohol products responsibly and should not be penalized for the transgressions of those who suffer from illness or simply eschew personal responsibility.

In closing, I have a friend and colleague who's fond of saying that he is in the business of advancing the art and science of responsible retailing. I think that perspective is a valid one, for as much as science is involved in identifying and fighting drunk and drug driving, there's also the art of incorporating human factors and realities. That requires the type of cooperative and collegial discussion that this forum has so

valuably fostered yesterday and today. Thank you very much.

MR. BLACKISTONE: Thank you, Mr. Bodnovich. Next we'll from Troy Costales, Governors Highway Safety Association.

MR. COSTALES: Good afternoon. Thank you, Chairman Hersman, Board members, for the invitation to have the Governors Highway Safety Association here, and I would be remiss if I didn't also mention that I knew Kevin Quinlin, many of you worked with him, and he would also be very proud of the fact that this issue has been brought forward for national attention.

The Governors Highway Safety Association does not believe that the impaired driving program is a monolithic one or one that there is one individual single countermeasure that's going to make a difference. It takes a community and it takes all of us working together at the table as you have done this last 2 days because, frankly, in some cases we may be working at cross-purposes. Bringing everybody together in a respectful manner to have the conversation is important, not just nationally, but locally as well.

Related to alcohol impairment, the Association supports that multi-faceted approach, strong laws, high visibility enforcement, a well-trained judiciary and technological solutions. Specifically, we support ignition interlocks for all convicted offenders, including the first time offenders, sobriety checkpoints or saturation patrols as well as DUI courts and judicial training. We support the proposed incentive that is

currently in the House and Senate reauthorization bills as it relates to interlocks and use of alcohol.

As you have heard earlier today, the DADSS program, we strongly support that, including the House and Senate proposals to continue funding that research because in the long term that will have a huge impact, potentially even, to the spot of eliminating impaired driving.

However, drug driving is a different issue and it's one that's a growing problem in the States. Our base of knowledge about drug-impaired driving is, frankly, 20 years behind that of alcohol and is much more complex.

We believe the drug-impaired driving problem should be elevated to a national priority, encouraging states to amend statutes, to separate and have distinct sanctions between alcohol and drug-impaired driving; develop standard protocols for procedures for drug testing laboratories to use in identifying drugs that impair driving; third, provide increased training to law enforcement identifying the drugged driver; fourth, increase the testing and reporting of drug testing information on fatally injured drivers and drivers involved in fatal crashes when they are not killed, increase training for prosecutors to help in the successful prosecution of drug-impaired drivers; and, finally, support international research to create an ignition interlock device that detects drugs other than alcohol for that non-alcohol-impaired offender.

The Association also supports the Drug Evaluation and Classification Program and serves on the IACP's Technical Advisory Group for that program, and we encourage all states to adopt the program and train drug recognition experts, and also at the federal level that the funds that are made available through the USDOT to states to support this program be flexed so that states can fund the program as today some funds are locked from being able to be used towards drug-impaired driving and it is alcohol only.

In addition, the Association believes that more research should be conducted to understand the scope of the impaired driving program, to examine the effectiveness of drug per se laws and to develop accurate, reliable and inexpensive roadside testing technology so that we can use that to detect the drug-impaired driving.

With respect to your role as the Board, we recommend that the Board continue to encourage states to enact strong impaired driving laws, particularly ignition interlock laws, for all convicted alcohol-impaired offenders, that you encourage states to have that local coordination effort at a senior government level so that everybody can come to the table respectfully and have the conversation to bring things forward so we don't work against each other, instead we work towards the priority items that are needed.

The Board can also remind the public that driving is a

privilege and not a right, and that every driver has a personal responsibility to drive safely without endangering others.

Zero is a lofty goal, but, first, we need zero in one hour, and hopefully that zero becomes one day and that one day becomes a weekend, eventually leading to a month and a year, but we've got to start there first because impaired driving today is claiming 30 lives in 24 hours. Let's make a difference one hour at a time. Thank you.

MR. BLACKISTONE: Thank you, Mr. Costales. Next we'll hear from J.T. Griffin representing Mothers Against Drunk Driving.

MR. GRIFFIN: Chairman Hersman, members of the Board, thank you for the opportunity to represent my organization, Mothers Against Drunk Driving, at your forum on substance-impaired driving.

The Board has asked me to answer two questions: what is the single most important thing that can be done to address impaired driving; and what is the one thing the NTSB should be doing on impaired driving?

Well, fortunately, MADD has an answer not just to address drunk driving but to eliminate it. MADD's ability to put a face with the crime of drunk driving changed the public's attitude about drinking and driving. Since MADD's founding drunk driving deaths have declined by 36 percent.

In the early part of the last decade we noticed that DUI fatality reductions had largely plateaued and, once again, MADD

decided to refocus the highway safety community on proven DUI countermeasures. While many lauded the significant fatality reductions, the fact is that the country had become complacent with 13,000 DUI deaths each year.

The result was the launch in 2006 of MADD's campaign to eliminate drunk driving. We gathered traffic safety experts and we're determined to focus on things that work. Our campaign calls for three things. First, all states should conduct and utilize high visibility sobriety checkpoints. NHTSA estimates that sobriety checkpoints can reduce drunk driving by 20 percent, and yet 12 states still do not fully utilize these lifesaving measures.

Couple with sustained high visibility, in part through NHTSA's national paid ad campaign notice, Drive Sober or Get Pulled Over, sobriety checkpoints are a critical tool for deterring drunk drivers. At MADD it's no secret that we support these law enforcement heroes who keep us safe by conducting these life saving checkpoints.

Recommendation Number 1, the NTSB should recommend that all states conduct sobriety checkpoints.

Second, alcohol ignition interlocks represent the best technology currently available to prevent convicted drunk drivers from becoming repeat offenders. Interlocks are important because we know that 50 to 75 percent of convicted drunk drivers will drive without a license. The reality is that most people need a

car to get to work, school or wherever they need to go.

Interlocks are paid for by the offender and allow them to keep their jobs, their family and a normal life. They just can't drive drunk and hurt your family or mine when the device is on the car.

While the NTSB currently recommends interlocks for hardcore drunk driving and also some members of this panel, MADD has found these laws -- has not found these laws to be practical or effective. A 2006 report from the Insurance Institute for Highway Safety discourages the safety community from focusing on hardcore drunk driving and says the hardcore group isn't the whole DWI problem or even the biggest part, so it doesn't make sense to focus too narrowly on this group. The result is to overlook a lot of other impaired drivers who escape this definition.

When the campaign began, only one state, New Mexico, had an all-offender interlock law. Today, 16 states, plus a robust 4-county California pilot program covering 13 million people, have all-offender interlock laws and the results have been phenomenal. Arizona and Oregon have experienced over 50 percent DUI fatality reductions since passing all-offender interlock laws. New Mexico and Louisiana have both seen over 30 percent declines in fatalities. We have not seen these types of declines in states that use interlocks to address high BAC or so-called hardcore offenders.

Recommendation Number 2, the NTSB should encourage all

states to adopt all-offender ignition interlock laws and stop focusing on hardcore drunk drivers.

Recommendation Number 3, the NTSB should encourage judges to require interlocks on all convicted offenders because every state, thanks in part to our campaign, now uses an interlock and almost every judge has this ability.

Finally, MADD's campaign calls for the development of advanced alcohol detection technologies that can one day stop a drunk driver from starting his or her vehicle. The Insurance Institute for Highway Safety believes such a technology could save 8,916 lives per year.

You heard earlier from Bud Zaouk on the details of the DADSS program. MADD has worked to support this technology by advocating for bipartisan legislation, the Road Safe Act, which would authorize $12 million per year for this program. The current Senate surface transportation bill, known as MAP-21, contains the Road Safe Act and would authorize DADSS for 2 years for a total of $24 million. Last year, 24 groups, including representatives from the alcohol industry, signed a letter in support of the Road Safe Act.

Recommendation Number 4, the NTSB should support expedited development of advanced alcohol detection technologies like DADSS.

Thank you again, Chairman Hersman, thank you, Member Rosekind for the attention you have given to this matter and to

your dedication to eliminating drunk driving. Thank you also to all the members of this Board for the opportunity to represent MADD here today. MADD has carefully looked at what works and what is possible to create a blueprint to truly eliminate drunk driving in this country. We invite you and everyone else who is serious about saving lives to join us. Thank you.

MR. BLACKISTONE: Thank you, Griffin. Next we'll hear from Jenna Michael -- McMahon, I'm sorry, Jenna McMahon who represents the National Organizations for Youth Safety.

MS. McMAHON: Hello. It's an honor to be here and I truly feel blessed to be here. Upon being here from the standpoint of youth, I'm also a living testimony. On April 22nd, 2008 I was arrested for drinking and driving. I was very lucky that day that I got pulled over, or that night shall I say, that I didn't harm anyone on the road and that I didn't harm my best friend or myself. I did spend 14 hours behind bars and these past 2 days have kind of been a recording for me because I've been through it.

I am from New York under the Nassau County court system and District Attorney Kathleen Rice. I plead guilty to misdemeanor DWI, which would be vacated on the date of sentence if I followed the following conditions, and that was going through an assessment of alcohol and drug and then being put into an outpatient program for 6 months. I also had to perform 50 hours of community service and 30 of those were a part of the district

attorney's program choices and consequences. I also attended a Victim Impact Panel for MADD. I had an interlock device also installed into my vehicle.

Upon compliance of all these, I'm being put into court. I obviously did comply with everything. Upon that, my license was suspended for a year. I paid a $500 fine. And then I had to take a 7-week course, which was also $275 on behalf of the Motor Vehicle Drinking Driving Program.

Right now I'm working part-time and speaking and continuing to speak on behalf of youth, and I thank God every day for this happening to be because as a youth I definitely was living a life that was out of control and it has turned my life around, and that's why I say it's a blessing. I never thought being arrested I would be sitting on a national board in Washington, so it is an honor, and I just want to continue to be able to speak and share my story. Like I said, I'm very lucky that I didn't kill anyone and -- but I do have a story because I was put through that process.

Yesterday the question was asked, you know, what -- is there any quick way to, you know, bring sobriety and the answer to that is no, and the answer to that is time. So in questioning and asking me, you know, what has changed my life, it's really been my faith and it's really been time. The person I was at 20 and the person I am now are two totally different people, and so, you know, growth has really been the biggest thing for me in terms of

changing my life around.

So, like I said, we know we spoke about it yesterday, a lot of times something like this, it's, you know, actually helpful to the person for this to have happened to them and I can definitely attest to that.

So that's it and I look to answer any questions that you may have because, like I said, the things that we spoken about in terms of having an interlock and paying and treatment, I've lived all of that, so I hope to answer your questions in any way that I can.

MR. BLACKISTONE: Thank you very much for your personal testimony. We appreciate that. Next we'll hear from Jeffrey Michael with National Highway Traffic Safety Administration.

DR. MICHAEL: Thank you. And thank you, Chairman Hersman and members of the Board and NTSB staff, for organizing and conducting this forum for bringing together an excellent range of speakers to talk about the many facets of the impaired driving problem.

If I could offer a couple of points in summary, I think it would be that technology, I believe, is offering us our long-term potential in reducing the impaired driving problem while our short-term needs will remain on adjusting and maintaining public priorities, and let me say a few things about that.

With regard to the technology, while, clearly, these devices will be technically complex, they offer, I believe, a

simple solution to a complex problem in that they simply stop impaired driving. They stop impaired driving whether the driver is a problem drinker or a social drinker, an underage drinker or an older drinker. Whether it's a repeat offender or a first offender, they simply stop the problem. It's an efficient solution to a complex problem.

Let me comment on the shorter-term needs for adjusting public priorities. While working on the technology we're dealing with a problem, I think, that defies a single solution. Our speakers have pointed out the need for strong laws, good law enforcement, effective adjudication and public awareness, treatment, all of which are necessary to reduce the problem, and, fortunately, for most of these areas we have evidence-based programs available.

And that brings up back, I believe, to a point made by your first speaker, Dr. Hedlund, who pointed out that we know what to do, we just need to do it, and therein lies our big challenge, I think.

Our public policy makers, our political leaders, our public officials deal with fixed resources and it's very difficult to maintain the kind of focus of energy and resources that's needed to maintain this broad array of impaired driving problem. It's, I think, our key challenge to keep the information in front of them to make them make the right decisions, to help them keep priority on the reduction of impaired driving. I think this forum

is an important contribution in that direction, an important call to action that can result in maintaining that focus. Thank you very much.

MR. BLACKISTONE: Thank you, Dr. Michael. Next we'll hear from Arlington Heights, Illinois Mayor Arleen J. Mulder.

MAYOR MULDER: Thank you. And, first, I'd like to thank the members of the NTSB Board here for raising the visibility of what from a mayor's perspective is a critical problem, impaired driving.

I've appreciate the opportunity to participate in this forum today and I've learned a great deal which I will certainly take back to my community, the village of Arlington Heights, as well as to my colleagues at the Conference of Mayors.

I found more information than I ever, ever anticipated by sitting through this day-and-a-half forum. It was very informative, it was heartfelt, sad as well as challenging, but throughout I noted a strong interest in the desire to write the message to address this extremely negative aspect of alcohol, that we need to respect what it can do to one's impairment, particularly in a motor vehicle.

I'm especially pleased here today for our kickoff, I guess, by Mr. Kerlikowske, the czar. Okay. Well, we'll just call him the czar. And he's a top-flight public safety professional. He's obviously been before America's mayors and has worked closely with all of us as a police chief and, most recently, as the

director of the Office of National Drug Control Police.

It strikes me that probably the most important role mayors can play in reducing substance-impaired driving is in the area of community awareness and education. There are certainly great programs out there and everyone's familiar with their taglines, but are they really hearing the message? Are they practicing the message? Are they sending it to their children and those that they have influence over?

As community leaders we interact with residents all the time and often they actually believe us and hear our messages. We will continue to do that, and we can hopefully educate all of them about the serious matters and the nature of this problem and that it's not just something that's going to always happen. We really have to make the commitment to try to fix it, to decreases it and continue to see all these charts going down with the number of fatalities as well as injured people in their own life.

We can certainly make sure that the drinking and the drug use and anything that impairs driving, sometimes it's just conversation, that we have to realize we're behind a motor vehicle and it can be considered a weapon.

What I also learned and I'm going to add to my message is just as important as not to drink and drive, but not to get in a vehicle driven by someone who has.

We can work with our police departments, and I'm very proud of our police department, to make sure that our drivers know

that they will face serious consequences for driving impaired and for breaking any of our laws. It's important that we let them know that these accidents and substance abuse and motor vehicle crashes are preventable, but we all need to make that commitment to make that happen.

Mayors can also play an important role supporting and promoting to work of organizations within our communities such as Mothers Against Drunk Driving, which do an outstanding job. I know that personally I always contribute money to the post-prom events, trying to remind kids that there are people within the community, not just their parents or their friends, that care about how they celebrate and that they get home safely and back to school on another day.

Finally, I want to say that these strategies continue to require creativity. Young people think they know it all. They know much more than we do and we're just old. It's challenging because they think they're invincible and it won't ever happen to them. And, unfortunately, it's when it does happen that you wake up.

And it's at the local level that we are challenged with the recessions, and this was mentioned yesterday by some of the speakers, and one of the questions that came to me was what's the most important step that can be taken to help us, and my answer, and I quote my police chief, "To direct more resources toward helping police officers making those impaired driving arrests."

Without federal dollars that comes to each local community we cannot afford to put our officers out to make those compliance checks. We just -- we've let officers go. We've cut, breaking my heart, Too Good For Drugs, which was a replacement for DARE. It's been a real tough 3 years.

And the federal support that allows us to assign extra officers to do the compliance checks is a way to reach the general public. It's a key issue. Our young residents and our adults who are making bad choices and setting bad examples are extremely important to our future, and people don't like government. They always say oh, why are you in government? Well, it's our responsibility to try to help people to make those good decisions.

MR. BLACKISTONE: Mayor, could you wrap it up for us, please?

MAYOR MULDER: Yeah. Help to make the commitment of reaching zero. Let's eliminate substance-impaired driving.

MR. BLACKISTONE: Thank you very much. Next we'll hear from Jacob Nelson with AAA.

MR. NELSON: Thank you, Chairman Hersman, members of the Board, for having AAA here today.

As America's largest membership organization, second only to the Catholic church, every year we try to take the pulse of where our members stand on a variety of traffic safety issues through doing sort of a nationally representative sample of them, asking them what their priorities are, where they stand on certain

issues, and every year one of the questions that we ask is of this long list of traffic safety issues, what are your priorities, what are most important to you, and consistently every year our members tell us that drunk driving is at the top of their list, so this is a very important issue to us and we're very grateful to be here to speak to you today.

We are not MADD and we're not trying to be MADD, and so we look for ways to fill the gap rather than to duplicate efforts to address the issue, and one of the ways that we did that was to work with a team of researchers to look at what are the gaps in addressing this problem and to look at what other stakeholders like MADD and GHSA and others are doing to address it, and of all of those opportunities what make the -- which of those make the most sense for AAA to address.

And to answer the question of what is the single most important we can do, and not to the exclusion of seeking out new policy approaches to the problem of impaired driving, but without question we think the emphasis should rest on improving existing state policy and strengthening it.

There are so many loopholes in existing state law and there's so much push-back in some cases with introducing new legislation that there's a ripe opportunity, I think, to really address the loopholes in existing law and to improve existing state code. Working closely with the criminal justice community with any state is a great way to do that.

Some common loopholes might include the no car problem with ignition interlock policies, look-back periods which we've talked about before, test refusal issues, and also who can draw a blood sample at the roadside or who must be present in order for a blood sample to be drawn. These are easy thing to fix. They don't require new thinking. It just requires action. And I think Jeff mentioned we know what to do, we just need to do it. That would be an example of something that's really easy to do that we could do today.

What is the one thing that the NTSB could do to help address the problem? I think that one of the great services that the NTSB could provide would be to keep its fingers on the pulse of what are the existing loopholes across the states and to help make stakeholders at the federal level, but also across the states, aware of what those loopholes are.

One way to do that would be to conduct an annual survey of stakeholders within the state and every bucket of the criminal justice community to ask them what they view as the priorities or the issues within their state, also conducting an annual audit across all 50 states looking at state code and trying to identify what those loopholes are. Act as a facilitator of that process, and there are a lot of partners like AAA, and I'm sure MADD and others would be interested in working with the Board to accomplish that goal. I think doing this will aid states in achieving strong, consistent and visible policies that build upon the

experiences and successes over the last few decades.

The other thing I just wanted to highlight before turning the floor over to my colleagues would be to argue that we've made a lot of progress obviously in the issue of impaired driving. We have a long way to go. I think that by preventing offenders from exploiting loopholes we can do more to address the problem, and I would also add that I think members of the criminal justice community need to do a better job of working closely together in sync to follow suspected offenders through the detection, prosecution and adjudication system to prevent them from slipping through the cracks, and I think there are a variety of ways that we can do that as well. Thank you very much.

MR. BLACKISTONE: Thank you. Next we'll hear from Kansas Representative Jan Pauls.

REP. PAULS: I want to thank the Board for having us here, the Chairman and Vice Chairman, members. It's exciting to be here. I, too, love D.C. even though you say you don't hear that much. I am, however, missing the last few days of the Kansas session, so that will be interesting if I get back. They may finish today, tomorrow, who knows. They may spend a lot of quality time together and I'll be there, too, so I appreciate the opportunity to be here.

What Kansas has done is something I know the Board has recommended to different states, and we formed a commission in 2009 consisting of 23 individuals to look at our DUI laws because

we all thought we knew what needed to be done and we just needed to do it, but we had some surprises along the line. There were things that we did not realize that were messing up our system.

Twenty-three individuals on it. We had judges, we had prosecutors, we had defense attorneys, sheriff. Secretary of Transportation or designees are some of these, highway patrol. We had SRS, our welfare group that funded some of the alcohol treatment programs. We had, as I've stated, addiction counselors. We had a real variety.

And the most interesting thing we found as we started meeting was that people didn't like each other much in these groups once we started talking about DUIs, and my history was such I could kind of identify with a lot of it. I've been a judge along the way and a prosecutor and didn't ever defend anyone on DUI, but did do some defense work in criminal law and such, so I had variety, and I found -- before I got to the legislature I was aware that usually prosecutors would blame the judge for bad decisions on laws, and then the defense attorneys would blame the courts, but the courts love to blame the legislature for writing really bad laws.

So when we all got together in these different committees, and we met diligently over the 2 years our commission was formed, I tell you, the first few meetings were really rough, and that's one reason we went to subcommittees. I was the vice chair of the committee because people would not talk to each other

or if someone started talking they'd cut the person off or make some remark like that's typical of a judge to say that. And so we eventually went into subcommittees where we could more openly discuss with each other. It got so rough one of the sheriff's got voted off his subcommittee, off the island, and joined our committee. I guess we were tougher in our committee. We helped him learn to share and discuss and such, but it was a really good experience, but we had some surprises alone the line.

We found out a big reason that DUI -- people who had multiple DUIs were getting off was because we had such a bad record keeping. We weren't picking up -- a lot of the municipal courts just weren't turning things in. Some of the district courts would not necessarily get their reports in.

So one of the things we did out of this commission was we set up a DUI central repository, moved it from Department of Revenue or where driving records were kept, and it now goes into our Kansas Bureau of Investigation, the criminal justice system, and that was funded -- the only way we could do that was through highway funding sources that the Department of Transportation shared, and I think that's largely because they were on this commission and saw how important this was.

The first year after -- the commission 2 years. The first year after we got to our halfway point the House decided we were all onboard with the mandatory interlock for the first violation. The Senate didn't like that. Towards the end of 2010

we convinced the -- 2009 we convinced the Senate to get onboard with that with the help of MADD and other groups, and so we have started that.

The other factor we found that was interesting was the lack of standard counseling for the alcohol assessments and the curriculum, and so that's what we're working on now, is to more standardize that.

We passed this law in 2010, which was really good, but this is our conference committee report for a change this year I the DUI law where it's going to criminalize second time refusal of a breath test. Right now first time refusal you get -- your driver's license is suspended for a year, et cetera, but we're going to a second time refusal or if you don't have a prior DUI conviction, and at that point then it is a crime on your record and we've got other penalties involved, so --

However, the Conference Committee Report I just called earlier today, it's still being held up as a result of the big fight in the Redistricting Committee about the maps. We're redistricting, so one of those political things that happens everywhere, so -- but I think the reason you need a commission is, like we are, you may find that the problem is not as obvious as you thought. So thank you.

MR. BLACKISTONE: Thank you, Representative Pauls. Next we'll hear from Mary Jane Saunders representing the Beer Institute.

MS. SAUNDERS: Thank you, Madam Chairman, Mr. Vice Chairman and members of the Board for giving the Beer Institute and the beer industry an opportunity to participate in this very important dialogue.

The Beer Institute and its member brewers, importers and suppliers share in the concerns I know you've heard expressed over the last day-and-a-half. I've listened to much of the forum by the web cast and I can tell you that as other speakers have --

CHAIRMAN HERSMAN: It's off.

MS. SAUNDERS: I've got feedback here. Maybe I'll push it back. Let's try that again. Okay. I'll try to sit back a little bit and not talk quite so close.

VICE CHAIRMAN HART: Maybe if you move it closer. I think they had to turn the volume up because it was too far away and they tried that, famous last words.

MS. SAUNDERS: Does this help? We can try. Otherwise, I can turn if off and just yell really loud. I'm good at that. I had three kids and I've perfected my yelling technique.

What I would like to say about what we've heard over the last day-and-a-half is that we share in the concerns that have been expressed. The malt beverage industry deplores drunk driving. We want our products to be enjoyed responsibly and only by adults of legal drinking age.

We also have a very longstanding commitment to promoting responsibility and preventing underage drinking and drunk driving.

I brought with me a brand new brochure that we've published on the commitment that our industry has shown to responsibility. It highlights a number of the programs that the beer industry sponsors across the country to promote responsible alcohol sales and to encourage the use of designated drivers and safe rides home.

We also produce tools for parents to use in talking to their kids about drinking. We have scaled these at different age groups because we know the message needs to be different at different age groups. We've also supported quite heavily the FTC's We Don't Serve Teens Program, and our member companies work with retailers to train servers on how to properly check ID's, understand the effects of alcohol, and how to intervene effectively to prevent potential misuse -- interim driving situations.

Now, we've heard a lot about a number of different solutions being proposed to address the issue of drunk driving. The Beer Institute believes that a combination of education, targeted intervention and strong law enforcement is needed to bring the numbers down. We think a combination of efforts is important because, as other speakers have said, we don't think there is a one size fits all or magic solution to the problem.

We also think that policies to fight drunk driving should be handled at the state level with input from state legislators and state law enforcement. We don't think it should

be federally mandated. That being said, we also believe that state judicial and monitoring efforts need to be strengthened, and if they are we believe they can lead to even greater success in reducing drunk driving. We want to see states in particular close loopholes that we believe hardcore drunk drivers and repeat offenders, in particular, exploit.

Now, state laws to address drunk driving are certainly extensive. They are also patchwork and complex. In most states murder statutes -- murder is a very serious crime I think we can all agree. Murder statutes may only take up a couple of paragraphs in the state code while DUI laws can take up 10 to 15 pages. The complexity that results from laws of that length have created what we believe is an unfortunate network of loopholes that are being exploited by the people who know them best, the repeat offenders and the defense attorneys, and I say that as an attorney.

In addition to making -- in considering how drunk driving laws should be simpler and harder to evade, we believe that states should work to make sure that the different parts of their criminal justice systems work more efficiently.

Now, to be absolutely clear, we do not want states to back off enforcement efforts. We simply believe the drunk driving is best addressed through support for all parts of the system, from the arresting officer all the way to the probation and parole officer.

Now, while have said that there are too many laws in too many states and they're too complex and there are loopholes, there are times when we do think that legislation is warranted. For example, we support increasing the remedies a Court may impose on a driver who refuses to take a breath test requested by a police officer. States that had addressed this, we believe, have already found significant reductions in the number of refusals, making convictions easier and elimination what we believe is a significant loophole exploited by repeat offenders.

The Beer Institute and its member companies also support the establishment of offender-funded systems, systems that are set up to establish DWI fines at levels that cover the jurisdiction's cost, and we think that higher fines can save taxpayer dollars and act as a deterrent.

In closing, I would like to extend an offer to you on behalf of all the members of the Beer Institute. We want to work with you on the kinds of initiatives that I've shared with you today. We want to encourage you to follow up with individual brewers, and I can put you in contact with them in you need their contact information or with me on behalf of the Beer Institute to explore these options. And, again, thank you very much.

MR. BLACKISTONE: You're welcome and we appreciate that generous offer. Next we'll turn to Stephen Talpins with the Institute for Behavior and Health.

MR. TALPINS: Members of the Board, I want to thank you

for hosting this great forum and giving me this opportunity to speak with you today. You all have chosen to tackle an extremely complex and challenging issue.

I was a prosecutor in Miami for 12 years and I can tell you I Took a beat-down every single day of my career. When I started I was 6'5" and you see what they did to me. It's just a very tough area.

You all have asked three questions repeatedly which I would like to directly address if you don't mind and stray from the script a little. You've asked why are we at a plateau, you've asked what is the extent of drug driving, and you've asked how do we break through the plateau, and I would submit to you that those three questions are inextricably intertwined. They're almost the same, and I'm going to explain to you why I believe that.

First, we are not in the current system addressing offender needs, and drug driving is the perfect example of that. The NRS, the 2007 NRS, showed that we have made incredible progress on alcohol-impaired driving. The percentage of drivers who are driving under the influence of alcohol or over .08 in the 1970s was far higher than it is today and has been declining steadily ever since that time.

But we know that drug driving is on the increase and we've done very little to nothing to doing that. We have done a very poor job identifying drugged drivers. Various other speakers have spoken about that. And it's created a problem because we're

not identifying them, we're not treating them.

What happens is somebody comes into the criminal justice system, takes a pleaded DUI and, by statute in every state, they're referred to some kind of treatment program. The treatment program addresses the needs that they're aware of. When somebody is placed on probation they are incentivized to deny any needs other than the ones that the program people are aware of because they don't want to take on any more responsibilities as a condition of probation. That means it's deny, deny, deny, and they get no drug treatment.

There's a study out of Norway which shows that drug driving offenders recidivate at a far higher rate than alcohol-impaired drivers. Because we are not identifying these people and addressing their needs I believe very strongly that that's one of the reasons we've hit a plateau. We need to identify these people and we need to address their needs.

Very simply, we cannot educate, arrest, legislate, prosecute or interlock our way out of this. No single solution works. It is a complex problem which requires a comprehensive solution, as every other expert in this area has said.

Interlocks are a wonderful tool. Don't mistake what I'm saying. I think they are an absolutely critical tool. They don't address drugged drivers and, just as drivers will drive without licenses, they'll drive without interlocks. It's that simple. We need to keep pushing ignition interlocks, but we cannot rely on

them as a solution.

I want to tell you about two things that are going on right now that I think the NTSB can get behind that will be game changers over the next couple of years.

The first is, again, better ways to identify drunk drivers and assess offender needs. All across this country, virtually every department in the country, has devised a standard operating procedure that if a driver provides a breath sample of 0.8 or higher they do not test for drugs. That is a critical problem.

In Miami right now we are running a study with the assistance of Dreager, NMS Laboratories and Afinitin (sp.) where we are doing two onsite oral fluid kits to identify people, to screen people for drug use. If they test positive we are then going to go to confirmatory laboratory testing. What this does, it allows us a cheap way of identifying people over .08 who have drugs in their system. It's also going to allow us to get a better grasp of the drug driving problem in Miami.

You may not be aware, but we have a little bit of a drug problem in our community that needs to be addressed. You would never know it because we don't really do much about unfortunately.

The second part is we need to implement program to change behavior. We need to shift focus in the criminal justice system from incarceration to community corrections. It's great to be tough on crime, and I'm a firm believer in the death penalty,

but it's better to be smart on crime and that's really what I'm talking about. You've heard a lot about DUI courts which are phenomenally effective. I don't want to beat that to death.

What I will tell you about is there are programs you've not heard about like the South Dakota 24/7 Sobriety Program, which is an offender-pay monitoring program which is working exceptionally well, and I can give you a lot of information about that. Member Rosekind, you and I have spoken about that in the past and I can give you articles showing how incredibly effective that program actually is.

Everything I'm discussing and everything everyone else is discussing takes leadership. I believe that Mothers Against Drunk Driving has shown us the way. We can model what they did for alcohol-impaired driving and do the same thing for drug-impaired driving, and NTSB can play an absolutely critical role.

There are two tactics I would encourage the Board to engage in. One is I would encourage you to engage in the pharmaceutical industry, the manufacturers and the retailers. It's unfortunate to me that they're not here today because I believe they have a critical role to play.

Thirty years or so when we started attacking the alcohol-impaired driving problem the alcohol industry was not very supportive to say the least. Today you look around and we see organizations like the Century Council, ABL and the Beer Institute and the Responsible Retailing Forum and others who have done an

absolutely phenomenal job supporting the criminal justice system. They've played a critical role in everything we're doing. I believe if you engage the pharmaceutical industry now we could get the same kind of great reception we've gotten 30 years earlier. That at least would be my hope.

The second thing I would suggest strongly is engaging private industry. Again, I'm working very closely in Miami with several different private companies, Afinitin, Draeger and NMS Laboratories. We should be doing the same thing on the national level. In criminal justice we have all sorts and needs that technology can address. One of the problems is we do a poor job of communicating those needs to private industry.

There are two different devices being created in Europe that hold promise that we know very little about. One is breath testing for drugs, a device called Sense Abuse, and another is intelligent finger printing which SmartStart is bringing to the United States. We need to know more about this. And, frankly, it's a darn shame that we're relying on or European cousins to show us the way in technology when we live in the greatest country in the world with the most powerful economy in the world. We should be the leaders in this area and I hope to see that and I hope that you all will encourage that. Thank you very much.

MR. BLACKISTONE: Thank you, Mr. Talpins. In this case I think we've saved the best for last. Dr. Robert Voas has a distinguished career looking at the impaired driving issue for

many, many years and, really, many people consider him one of the fathers of most impaired driving interventions and research. So he's here today representing the Pacific Institute for Research and Evaluation.

DR. VOAS: Thank you, and I want to thank the panel. I particularly want to thank the panel for not making a requirement for being on this hearing to come up with something unique because in the last day-and-a-half I think you've heard just about every possible approach, and that's been many an approach and that is good. There are many things that can be done and much is required to sort those out and to make sure that the best ones occur.

I wanted to speak to basically one issue and that is decision making. The National Highway Traffic Safety Administration has done a national survey of drinking and driving and estimates that every month there are 85 million drinking driving trips. That means that in a year there's a billion drinking driving trips, which means that there are a billion risky decisions. And I think this is the center of what we have to deal with and it was mentioned really at the outset of this session by Dr. Hedlund.

We have to deal with the individual's decision making, and I think the most powerful method of doing that is the high visibility enforcement. That is convincing people that there are consequences, unpleasant consequences, if they drink and drive. If we cannot do that, then we will not reach zero, so that is a

really key problem.

Now what do we mean by high visibility enforcement? That is sobriety checkpoints and special enforcement units. The problem is that we're not seeing enough of that. This panel actually 30 years ago, in 1984, had a report on impaired driving in the U.S. and flowing from that were a whole set of letters to the state that urged them to have checkpoints and to make more checkpoints and to use that method, and, unfortunately, over time that has not been fully followed, but it's time for that to be reconsidered and see if we cannot get the states to be more active in this area.

Now one of the problems we face is that the police departments in struggling to meet all of the potential concerns with using the checkpoint technique have tended to overreach and to use too much manpower which makes them costly, and that has made them not very forthcoming, and using them today, as you know, we have only 18 of the 50 states that use them even on a weekly basis somewhere in the state.

We need to increase that if we're going to increase deterrence. It is not a matter of just making arrests, though arrests are important, but only a small portion of the people that are producing our fatal alcohol related crashes have had a prior arrest. We have to influence all of those that are going to do those crashes without arresting them. That means we have to use deterrents, and that is something that this panel can do by

looking back at that 30-year-ago program and updating it and focusing on sobriety checkpoints to see whether we can find the way to actually get this carried out.

Now, a barrier to that has been this concern of the police departments that it takes a lot of individuals, that makes it expensive, and that they don't get very many arrests, but there is research that has been supported by NHTSA and others that shows that you can get a large influence from much smaller numbers of officers at checkpoints and that we can increase the arrests by 50 percent if they'll use the technology of passive sensing, but we must persuade the police that this is possible so that within their budgets they can manage this because there's been a tendency to rely on the federal government through the Highway Trust Fund for funds and we know that that trust fund is running down.

And, further, we know they're about to be hit by a great wave of new requirements based on the problem of drug driving. So that makes this particular point an unusual opportunity for this panel to take action and put out again a report on this subject to be followed, as it was back in 1984, with a series of letters to the states urging them to consider to increase high visibility enforcement in the interests of impacting that one billion risky decisions that are going out there every year.

CHAIRMAN HERSMAN: Dr. Voas, thank you so much for summing up for us. We really appreciate you being here and all of the work that we've done reading much of the body of work that

you've prepared over the years. It's been very informative.

We are going to take a break now for about 20 minutes. We will reconvene at 3:10, at which time we'll move to Technical Panel questions followed by questions from the Board members. We stand adjourned until 3:10.

(Off the record.)

(On the record.)

CHAIRMAN HERSMAN: Welcome back. We'll now begin with questioning from our tech panel. Mr. Blackistone?

MR. BLACKISTONE: Thank you again, Chairman Hersman. I'd like to direct our first question to the two elected officials on the panel, Mayor Arlene Mulder and Representative Jan Pauls.

As elected officials and regardless of whether it's executive branch or legislative branch leaders, you and your colleagues are constantly confronted with a wide variety of issues and these can range everything from setting budgets and allocating resources, spending and taxing priorities, dealing with matters such as education, environment, economic development jobs, and the never-ending array of social issues.

And my question is where among this vast panoply of issues does impaired driving fit among your colleagues, how important is this issue to your colleagues?

MAYOR MULDER: Having been a high school teacher prior -- I don't if it's there, yeah -- high school teacher prior to being elected as the president of our community as Mayor I'm very

tuned into kids and underage drinking, and as mayor you're also the liquor commissioner, so we sent out a sting every year and we give warnings, but I have zero tolerance, so any service to underage people I can really put down my hatchet and make it very painful for the establishment. Their responsibilities -- there is always circumstances, but I try to use influence there. I also can, you know, make it difficult for people to get the license. They have to have a reputable reputation and things like that.

So that's the state of Illinois. I'm not sure if all states are governed that way, but it is an important thing to me because it impacts so often the victims of drunken driving as young people and, you know, adults do it as well. It's just -- it's such a waste of life.

MR. BLACKISTONE: Representative Pauls, among your colleagues how important is dealing with impaired driving issues?

REP. PAULS: Well, it's like anything else, there's some years that's a more urgent issue than others, and I think one thing we did with the Commission was we helped focus attention on a very important topic and people got more onboard with it as they were hearing reports back and we were looking at bad record keeping, et cetera, so it depends, but the sad thing about DUI or impaired driving in general is that there's always somebody out there that's going to make that a front-page headline, but that helps in the legislative process.

We had a real spectacular accident at home a year ago in

Hutchinson where a gentleman, who in other ways is a very nice gentleman, crashed his car into a couple of gas pumps at a service station and did a lot of damage. Amazingly, no one was killed including him or even injured, but it got a lot of attention because it was probably his 14th or 15th DUI.

And, you know, there's always some individual out there that's willing to help in the legislative process accidentally or I should say crash -- by a crash they're willing to help, and so it's one of those topics that keeps coming up. Sometimes when me colleagues say I don't know if I want to vote for this bill or I don't want to do this or whatever I point out the fact that you can vote no if you want to, but if you have a fatality accident, crash, in your district then you're going to regret the fact that you didn't support tougher standards or new approaches to DUI, but you're right, it's very hard.

This year we've got redistricting. We're the last state to finish. We've got big school funding issues, big tax issues, et cetera, and it's hard to get the kind of focus you'd like on some of these issues. But the nice thing about the Commission is that people realize we're finally get all of our laws unified and I think in the long run this will save a lot of legislative time as well as saving a lot of -- more importantly, a lot of lives.

MR. BLACKISTONE: Great. Thank. Now we'll turn the questioning over to Ms. Davis.

MS. DAVIS: Jenna, this question's directed at you. In

your opening you mentioned some of the consequences that you experienced. Could you explain which one or if there were several that had the most impact on changing your behavior, and then also which ones did not have impact on you?

MS. McMAHON: I think personally for me, and it may be different for others, but having to speak. I remember having to script a story, go to the district attorney's office. They had to review it and then my dad basically drove me around Long Island because I had to speak. I don't know if any other states have such a program, but the district attorney brings relative cases, real cases, and sometimes it's used pre-prom or maybe to kick off the high school year, and then there are people like myself who are in conviction that have to speak and share their story. Lucky for me I really do enjoy speaking and being a mentor and just being an example to youth, so that's something that I carry out today. I still speak in high schools. To be honest, I've probably spoken in almost every high school in Nassau County and I enjoy that.

In terms of what was effective, I think that just the overall -- all of the consequences because I can't say that maybe one in particular was, but I think having eight consequences, and if not having -- if not complying with them, seeing that I could have been sentenced up to a year a jail probably was something big.

Also, I know we've spoke about it a lot, but just the

inconvenience. I think had something like this had happened to right now my life would really be ruined. I was young, so I had the support of my parents and it wasn't like I had a full-time job or a family or anything like that going for me.

So also speaking from, you know, where I stand now in terms of employment, that's a big issue. I was lucky that due to the fact that I complied with everything I was charged with a DWAI, Driving While Ability-Impaired, so I do not have a misdemeanor on my record. I have a traffic violation which I'm thankful for.

But in terms of the interlock, also I do think it was effective, but I could say that it was probably more obnoxious and that's something that I go in my speech when I speak to high schools, that we take for granted a lot of things in life and we take for granted hopping in the car, whether it be going to work or getting coffee or anything like that, and, you know, I tell them that I had to sit in my car, I had to wait 30 seconds, and my car would speak to me.

I remember being very embarrassed because, you know, had you been next to me at a red light and, you know, it asked me to provide a sample, because it does ask you to provide samples as you drive, you know, here I am holding a big box and blowing into it and someone that glanced looking over is probably wondering what is going on.

You know, also I remember just being at lights and

putting up my windows because it was very loud. It came over a speaker like this and it said please provide a sample, so if you were next to me and your lights were down -- you know, your windows were down, you would definitely hear that as well.

I know something else that we spoke about yesterday, that I did have a camera on my dashboard, so in terms of people saying oh, you could have somebody else blow into that, I don't know if there's different interlock devices, but the one that I had per se did have a camera on my dashboard, so --

And something else I just want to really point out is that in terms of treatment, I have to say when this happened to me when I was 20 years old I tell you right now that I was really not up for quitting partying. So, to be honest, it didn't really stop me. I think from a clinical perspective someone could definitely agree with me that until someone is ready to stop those behaviors they're not going to stop, and being a part of treatment I looked at it as okay, how am I going to beat the system, how am I going to tell these people what they want to hear and get out of here because I knew had I told them the real truth that I would have been there a lot longer. And in terms of initially being assessed after being arrested, you know, your assessment is only as good as the truth that you provide.

So, you know, to answer your question, like I said, I just think everything in combination was effective for me, and, you know, that's kind of the end of it.

MR. BLACKISTONE: Thank you. Ms. Roeber?

MS. ROEBER: I'd like to -- we've heard a lot about various countermeasures, various interventions and their different levels of effectiveness, and so the question I would have is how do we make sure that the most effective programs are getting used? In other words, how do we hold everybody from the law enforcement officers to the state program folks to the legislators accountable to make sure that they're using the most effective programs, and I figure it's only fair to start with Mr. Costales who represents highway safety offices.

MR. COSTALES: Well, we happen to be in a time of instant gratification, instant popcorn, instant movies, instant messaging, and it would be pretty easy to fall trap to say that if we all got together one time we'd have an instant fix, and that's not the case with this one. It's too complex.

It's bringing together a group of senior officials that have the authority to do something about it from the management side, the policy side, but also have an understanding of what it's like to have another foot on the ground and actively doing the work, that comes together that will bring information in, but also turn around and give information out. Sometimes these commissions and everybody bring information in and nobody ever knows what's going on with the conversation, with an understanding that it's a place to raise issues, good and bad, and that we think about the system and all of the approaches that are there and be willing to

risk, let somebody move your cheese, because if we don't do that we're not going to move forward, we're not going to make any improvement.

And there are times when members around that committee have to take the issues and go public to the court of public opinion in order to call somebody out because they are not following the rules, they're not playing the game fairly, they are not participating in the conversation and that's tough, particularly in a world of politics, that that one statement you make that ends up in the press could end your career that quick. But by having advocates, volunteers and others that are willing to go ahead and raise the issue and have a spot to raise it uniformly and fairly and people understand what their role and responsibility is, you can start holding some people's feet to the fire to make sure things are done, but you've got to understand that walking into it that's taking a risk because, just as you may see something going on with somebody else, they may, in turn, see something going on with you.

MR. BLACKISTONE: Thank you. I'd like to address a quick question to our two representatives from the alcohol industry, Mr. Bodnovich and Ms. Saunders. What is briefly the industry's position with regard to various technological interventions we've heard about, ignition interlocks for all offenders, longer term DADSS project which involves passive alcohol sensors being installed as original equipment in vehicles?

MS. SAUNDERS: We have not taken a position on the longer-term passive devices issue. With respect to interlock devices, we do have a position that they are appropriate for repeat offenders and at the discretion of the Court for certain first time offenders, particularly those with a high BAC.

MR. BODNOVICH: We hold a similar position to the Beer Institute as Mary Jane outlined, although I would add that our state affiliates have worked within their states to support the use of alcohol -- or, excuse me, ignition interlock technology for repeat offenders and hardcore drivers and sought the passage of bills in recent years that have called for that implementation and use.

MR. BLACKISTONE: Is there a reason why you have not supported ignition interlocks for first time offenders?

MR. BODNOVICH: I think that at this point there's, you know, been a focus on, you know, what the hardcore offenders, you know, cause and bring. It's been at the forefront. I think our position is one that's constantly being studied and evolved by our Board of Directors as, you know, we see the realities of -- and successes of different policies in different states, so I would say that it's a policy that's constantly being reviewed.

MR. BLACKISTONE: Thank you. Ms. Davis?

MS. DAVIS: Ms. Hackett, one of our panels yesterday focused on education and outreach. Could you address education and outreach programs, messaging on the drug-impaired driving

issue?

MS. HACKETT: One product that the Office of National Drug Control Policy has put out that Director Kerlikowske mentioned today in his comments is the drug driving toolkit. This was provided by our National Youth Anti-drug Media Campaign, the Above the Influence campaign, and it provides parents, caregivers and trusted adults with a step by step guide of how to increase the knowledge and awareness of the drug driving issue in their community.

As the Director stated, we see surveys again and again that young people are listening to what their parents are telling them even when parents don't believe that they are the most influential person in a young student's life, and we are really hoping to provide parents with the tools they need to have these important conversations with their students, but also to make this a community initiative.

We've provided this toolkit to our drug-free coalitions, which are located around the country, to allow them to work in their communities and address their community needs in collaboration with the students and the parents in their schools and communities to work in their communities and raise awareness.

We've also been working with a lot of non-profits and organizations that are in the room today so we can focus on the collaboration and the coordination of what we're all doing on the education side. We don't want to keep reinventing the wheel. We

really want to make sure that we're providing to communities and school associations as many products as we can and the best products we can so they can go forward with these products and address the issues in their community.

MR. BLACKISTONE: Great. Thank you. Ms. Roeber?

MS. ROEBER: My question is directed at Mr. Blackman who mentioned the hardcore offender and Mr. Talpins who mentioned 24/7 because, as we heard yesterday, particularly from the judge and the treatment of professionals, all of the people on the consequences panel, that hardcore drinking drivers are resistant to change. That being said, we have limited resources, so I'm thinking not everybody is going to get into DWI court. What are some, I'll say, lesser expensive alternatives or way to address the fact that we may not be able to get everybody through the most comprehensive program?

MR. BLACKMAN: Well, the cost of a DUI or the cost of dealing with hardcore drunk driver, I think, is a lifetime cost. The fact of the matter is that we're working now with the Cambridge Health Alliance and Harvard Medical School to come up with a better assessment tool.

The fact of the matter is a better assessment which, in fact, may prove to be effective on its own as an intervention, but also that provides a clearer picture of not just the alcohol issues that, again, those offenders may suffer from, but of drug offenses as well as mental health issues, to really look at that

offender as a holistic problem, if you will, and be able to deal with that.

In some states there is mandatory assessment, in some states there is some mandatory treatment, but at the same time we've seen issues where, in fact, hardcore offenders would rather go to jail and not have treatment because they don't want to face their demons, if you will, regardless of what those demons may be.

So I'm not sure that even that falls into the category of if you can put A together with B you're really going to equal C, but I think at that point if we can get a better -- we have lived by a mantra for many years which is swift identification, certain punishment and effective treatment. The sooner that officer understands either by repeat offensives or a high BAC that that offender may not be somebody who is a beginner or has a simple drinking issue but, in fact, is somebody who demands a different track, then that offender goes down that different track.

Swift identification, certain punishment, all the data suggests that the more certain the punishment, the quicker the punishment, the more reliable the punishment, the more effective it's going to be, and, of course, then treatment, not just treatment, but treatment and aftercare, because for many people it will be a lifelong issue.

MS. ROEBER: Mr. Talpins?

MR. TALPINS: Danielle, I want to thank you for asking

me that question. Since I left the Miami State Attorney's Office in 2004 I've spent basically half my life traveling the country talking about justice solutions, and every time I talk about these programs which we know work the first comment I always get is show me the money, and I feel like Jerry McGuire because actually I do have the answer to that. The reality is that we can create self-sustaining programs.

Again, DUI courts are a perfect example of that. There's an academy court that was taking place in Athens-Clarke, Georgia that was run by Kent Lawrence which actually became a revenue-generating program based on offender fees. While that's not the norm, there are other courts like that around the country and I would encourage you all to speak to David Wallace who's the director of the National Center of DWI Courts for more information on those.

As far as the 24/7 program, are you all familiar with that program out of South Dakota? Let me give you some details of how that program works because it's probably very different from anything you've ever heard. I know Member Rosekind's familiar with it because we've discussed it.

But basically what happens is the program is geared toward what we call the hardcore offenders. These are offenders who either refuse to provide a breath sample or people who test 1.5 or above or people who have priors, and what happens is all these people are put into the program as part of a condition of

their bond. We don't wait for sentencing to put these people in the program. And they either report to their local sheriff's department twice a day, every morning and every evening, for a breath test or they wear a transthermal alcohol monitoring bracelet, a TAM bracelet, manufactured by Scram -- or by AMS. Excuse me, it's a Scram device. And they're also randomly drug tested.

And whenever I describe this people say to me why in the world would the sheriff's adopt this program which is not mandatory, why would they voluntarily want to be part of it, and the answer's very simple, again, it's revenue-generating. Offenders pay to participate in the program, and the collection rates are quite high. They exceed 90 percent and the program now is self-sustaining. It was seeded by the legislature, but, again, it's now a self-sustaining program.

I believe coming out of an obviously much large jurisdiction in Miami that this program can very easily be taken to scale either by using twice daily breath testing as the economic engine for the program or at home breath testing. Several companies, most notably SmartStart, have developed devices that can be used in the home that are almost as inexpensive as in-station breath testing and can be used to generate funding as well, so if we do this right we can actually pay for the program itself.

And that doesn't even talk about the huge amount of

money we can save by placing people on community corrections as opposed to incarcerating them. And, again, this actually reduces recidivism, so not only do we save money or make money, but we improve public safety and public health in the process.

MR. BLACKISTONE: Thank you, Mr. Talpins and Mr. Blackman. We appreciate your answers. Finally, MADD's campaign has put a significant emphasis on ignition interlocks, which we've heard from a variety of people have been very effective at preventing impaired driving while they're on the vehicle.

What additional steps does MADD recommend to ensure that the behavioral change that occurs while they're on their vehicle continues after the interlock is removed?

MR. GRIFFIN: Right now, Steve, our focus is on actually getting the device installed, actually working with the state legislatures to make sure that they pass the laws. When MADD started its campaign, as I pointed out in my testimony, only one state required interlocks, so right now MADD's focus is working in individual state legislatures trying to pass those laws that require offenders to use the devices.

MR. BLACKISTONE: Thank you very much. Madam Chairman, that concludes that questioning from the tech panel.

CHAIRMAN HERSMAN: Thank you. We'll go to Member Rosekind.

MEMBER ROSEKIND: First, thanks everybody. People are

wondering -- I'm not sure we've ever had a forum that ended with a 13 person panel and we're going to let most of them speak, and I'm thanking you because everybody stayed on message, very much responded to the requests and was quite thoughtful in their comments. In particular, several of you were very direct. We asked about -- you know, give us some direction and thoughts about what we could do and thank you very much for those concrete suggestions.

So my questions are actually kind of much larger scale and, frankly, if I let all of you answer we're already out of time, so let's think of this as the lightning round and basically I'm going to ask some big questions and this is the only time if you have a response, raise your hand. We'll try and go to two different people, put some other questions out and see if we can cover a broad range starting with we've looked a lot at how the laws and other things have changed, and here at the NTSB we look very often as safety culture, and I'm wondering if you have observations or data about how culture, our culture here in the United States, has changed around drinking or drugs and driving over the last 20 or 30 years. Mr. Nelson, first hand up.

MR. NELSON: So your question is how or how can we do more?

MEMBER ROSEKIND: It's really both, but I'm really interested in the cultural aspects of what's changed and do we have data that shows that's changed. Pretty much everyone's used

fatalities as an outcome measure. That's the number we look at at 31 percent, so we know about designated drivers. What's changed in our culture?

MR. NELSON: I think that it's just no longer socially acceptable. It's gone from, you know, here's one for the road to, you know, don't drink and drive. I just think what is considered socially acceptable in the United States has changed, and that's something that takes a long time to do. We can't do it tomorrow, we can't do it next week, but we can make incremental steps in that direction.

I think one of the ways that we can make, you know, impaired driving more of a higher priority across the United States within the general public in particular is to be a little bit more serious about dealing with the issue with folks who are convicted. We shouldn't hear stories about people who -- they kill somebody and it makes the media and they've had 11 prior convictions. I mean that's ridiculous.

I mean if the criminal justice community were to come together and to really understand, you know, for judges what makes their job easier and harder in terms of bringing an offender to justice. And the same for law enforcement, what makes your job easier and more difficult in terms of dealing with drunk drivers? I mean the system could work a lot better, and we wouldn't see, you know, offenders killing somebody having offended or been convicted 11 other times.

So I think getting serious and coming down really hard on the issue, the entire criminal justice community I think would send a strong message that would sort of reinvigorate where we've been.

MEMBER ROSEKIND: Let me just restate again, one of the things that we've done and often cited is, you know, when seatbelts first came out there was maybe 14 percent use. Thirty years later we're at 85+ percent. Do we have that for designated drivers or other kinds of cultural changes? So Dr. Michael?

DR. MICHAEL: We have a national roadside survey that is a very good indicator of the change in culture that shows a reduction in drivers above .08 from more than 7 percent. It's just ambient roadside checking, not crash involved, not fatality, back in the '70s to less than 2 percent now.

I think that's a very good indicator of cultural change. It's just the sort of outcome measure that we're looking for. I think that we, to a large extent, have MADD to thank for that change. Their activities starting in the 1980s with enacting laws at the state level, more than 200 laws passed in a little more than a decade. The accumulation of those laws makes a very powerful statement about community tolerance for that behavior and I think that's largely responsible for the change.

MEMBER ROSEKIND: Great example. I'm going to keep moving. Mayor Mulder, Representative Pauls, will you please say something about the political will that's needed? There's been a

lot of talk about how we have to make this a priority, keep it visible, make changes in law enforcement and legislatures. Talk about the political will at, you know, the city or state level that's required to really get a push forward on this.

MAYOR MULDER: Unfortunately, sometimes it's an accident that raises that political strength. In the case of our police department, one of our officers, Tim Sheehan, less than 5 years ago was parked, midnight shift, at a stoplight and was hit by a speeding car and drunk driver. He's physically very impaired at this point. He survived after a 90-day coma. And compliance with the laws of not driving drunk is very near and dear to our entire police department and there's 113 officers.

And I think, unfortunately, it didn't take that incident, but they're a lot less likely to say we'll give you a pass today. They write that ticket and send you to court, and they're hoping to have an impact on this person to say, you know, that was stupid.

REP. PAULS: Obviously accidents, other situations like that, influence legislation, but I do think that a lot of your states are not dissimilar to Kansas and that our laws were not real consistent and were not applied equally as they should have been in municipal courts as well as the regular district courts.

And the attitude has changed and that helps a lot. We still joke that we have maybe one county in the state that you might help your re-election odds if you got a DUI, but most

counties in the state that's not true.

And there's a big change in philosophy. Even the amount of alcohol that's served at legislative receptions, I think, is much different. We obviously don't have term limits in Kansas because I've been in since '91, but I've seen a change in philosophy even on what's accepted as far as drinking behavior at different receptions, and people are real open about making sure that certain people aren't driving if they've been at a couple of receptions and such. I mean open within the legislators talking to each other and getting keys and such.

So I think that change is good, but I think a lot of places are like Kansas. Our laws, we chip away a little bit at them each year and change things and we get a reaction back that that didn't work, so we'd change it again, and we weren't leaving laws really in effect long enough to see what had a good influence and what didn't.

And I really would encourage states to look at doing the commission. It was expensive in the sense of paying for mileage and per diem for people attending it, but such a good investment in the sense that we now have a group that's real invested with those issues and will talk with their local legislators. If they didn't know the legislators in their district they got acquainted. It's just really made a big change in our culture.

And here we are at the end of a session in Kansas and we're still trying to get some major changes to our DUI law that

we passed last year, and I think that shows how important the issue has become. And it's not one of those things where you -- you don't get the importance due to a real sad tragedy that's occurred, but people are starting to be aware of it.

And I think the culture's changing, too. One of the prosecutors that talked yesterday was talking about there but for the grace of God go I. I think things are changing. I think there's a lot of people now that can say they've not been in situation they could have been arrested for DUI. You know, maybe they got in a car and started to drive somewhere and realized.

But I've always thought that was kind of bizarre anyway, to personalize those kinds of things. I remember being in the prosecutor's office sometimes people would be looking at a crime involving incest and they would be saying oh, I looked at my child today and thought how could I do that and I thought, you know, we need to get away from those types of attitudes anyway.

But I think once people start -- are getting away from the culture that oh, it's okay, it's accepted, everybody could have gotten arrested for a DUI, everybody drinks and drives, I think as we're getting away from that that's really a positive change.

MEMBER ROSEKIND: And I just want to go -- Dr. Voas has a comment here before we -- I don't know if it's about the culture or the political will.

DR. VOAS: Your original question on culture, it's one

of those questions that we all say gee, I'm glad you asked that question because it happens. We've just completed a study which is relevant to that. We studied young people going to electronic dance events. The age group is 18 to 34, which is defined by NHTSA as the highest risk crash group, and we've determined their decisions about driving by asking them who is the driver, who is the passenger as they leave these events, and what we found was that while half of the passengers were .05 or higher, only 20 percent of the drivers were, so right away we see something that's happened in our culture.

We also ask do you have a designated driver and then we measured the designated driver as they left, and they are lower still than the passengers. And we also looked at drivers who drove to the event, but decided not to drive home, and they had -- 60 percent of them were .05 or over, so we see a decision being made by people who are at risk. And then we have to ask the next question, well, who substituted for them? In those individuals only 20 percent were .05.

So we see in effect our cultural environment changing where drivers are, in fact, at lower BAC and the designated drivers are at lower BAC than regular drivers, and those who are at high BAC are accepting someone else to drive, and the people that substitute for them are at lower BAC.

MEMBER ROSEKIND: All right. Thank you.

CHAIRMAN HERSMAN: Member Weener.

MEMBER WEENER: Well, thank you. Over the last 2 days it's become clear that what we're really talking about is impaired behavior due to drugs, but one of the drugs in particular, alcohol, has been around for about 8,000 years in terms of documented use, and a lot of technology and so forth has been developed to handle alcohol impairment, so things like interlocks, DADSS, testing processes and so forth, but we've also heard from Director Kerlikowske that drugs are rapidly overtaking alcohol in terms of significance in this regard.

So this is really a general question. What technology do we need to develop in order to address the drug impairment, drug driving, in the same manner that we have addressed alcohol impairment. That's open to anybody on the panel. Dr. Michael?

DR. MICHAEL: We currently make about 1.5 million arrests for drunk driving, for alcohol-impaired driving, across the U.S. each year. I think that in order to approach those levels for drug driving arrests that the criminal justice system needs to be as familiar, as efficient and as streamlined as it is for alcohol. It's a more complex problem. The technology is going to be more complex. But I think the vision, and it is a vision, I think the vision is to have drug-testing technology which is as available, that is in the police station, as defensible and as affordable for drugs as it is for alcohol. So we need, in effect, evidentiary level drug testing devices that are alongside or integrated with the alcohol devices.

MEMBER WEENER: So, as I understand, we need to try to mirror what we've got on the alcohol side. Anybody else have a comment? Mr. Griffin.

MR. GRIFFIN: I have a comment. I would urge you to be careful when you talk about looking at alcohol in terms of what we've done because we still have a lot of work to do, and so when you look at some of the countermeasures that are out there for alcohol, and we're still losing almost 11,000 people a year, so there's still a lot of, a lot of work to be done with regard to the alcohol countermeasures.

MEMBER WEENER: But to some extent we don't know out of that 11,000 how many of those really involved drugs as well because we stop testing once we find alcohol.

MR. GRIFFIN: That's true, but we do know that of those 11,000 that it's at .08 or higher, so in some respects -- you know, if you're at .08 or higher and you've got a technology like the DADSS or an interlock on your car that car's not going to start, so that's going to prevent that impaired driving trip whether they're on drugs or on alcohol.

MEMBER WEENER: Jacqueline, you had a comment?

MS. HACKETT: One of the initiatives that the administration has been supporting is a driving simulator that is examining driving impairment as a result of marijuana use and the combination of marijuana and alcohol use. I think we do need to be very attentive to the poly-use issues that we are seeing on the

roads.

And I think also, sir, when you're citing your prior data on the designated driver, you know, we might not have numbers on this, but we're hearing that the designated driver isn't drinking, they're choosing just to smoke or just to use prescription drugs.

You know, some young people are under the impression that if they're not drinking they can use other substances that are safer for them when they're on the roads, that smoking marijuana will make them a more cautious, slower driver. We know these things aren't true and that's not getting through to the young people who may be choosing to not use alcohol and to be the designated driver.

But we do need to make sure that we are looking at this poly-use component and the number of drivers on our roads who are using alcohol and drugs, and hopefully this administration-supported driving simulator can give us some concrete data on that.

MEMBER WEENER: From the perspective of your office, is the drug driving, drugged impairment, increasing more rapidly than we would see alcohol impairment?

MS. HACKETT: I'm not sure about the general numbers, but I imagine our NHTSA colleagues would, but I think the fact that one in eight high school seniors drove after smoking marijuana in the 2 weeks prior to the Monitoring the Future Survey

is astonishing and that's something that we should all be aware of. You know, an average graduating class might have 500 students. How many of them are on the roads after smoking, on your roads, in your communities, and how many lives are they putting at risk by those choices?

MEMBER WEENER: With that, thank you from my perspective for all of your efforts and your candor today.

CHAIRMAN HERSMAN: Vice Chairman?

VICE CHAIRMAN HART: I'd like to commend the organizers of this conference for bringing in an offender to be part of this activity and that's one of things that I want to talk about. For those of you who were here yesterday, you saw that Harold Dennis is in the process of making a 25th anniversary documentary regarding the Carrollton bus crash, and he mentioned that he's trying to talk to the offender.

The offender served 10 years in prison and is now basically a recluse, and I wonder how much do our public services ads, which obviously have victim testimony and victim family testimony, how much do have of offender testimony because it destroyed his life, too. I mean he wakes up every morning thinking I changed that fast the lives of 67 families and killed 27 people by what I did wrong, and so his life is destroyed, too.

And I think it's one thing to tell people you're going to destroy other people's lives by what you do. I think it's quite a different message to them you're going to destroy your own

life. So I commend the organizers of this for bringing Ms. McMahon to tell us about how it affected her life.

And I would commend as we go into public service announcements and other publicity to try to bring attention to this, put that message in there, too, you're going to destroy your own life, not just a bunch of other lives, you're going to destroy your own life as well.

One of the things that was brought to mind, changing the subject, by Mr. Talpins' comment was on the cost benefit and I wonder -- you heard a lot about the resources involved with vans like the BAT Mobile that we saw up there today and with the checkpoints and things like that, but what we didn't hear was the balance of how much is saved by the deterrent effect of people who aren't going to be going through the system now because of this deterrent and I just wondered do any of you have any comments on the cost benefit aspects of things like these vans and things like the checkpoints because we're just not hearing about that. I have to think there's probably a positive story to tell. We're just not -- I'm just not hearing that. Does anybody have any comments on that? Mr. Nelson.

MR. NELSON: I don't have the answer for you, but I can just tell you that the Centers for Disease Control and Prevention and the National Center for Injury Prevention and Control has looked at that very issue and found very little information available, and so it's one of their stated research needs for the

research community to consider, so I'm not sure that those data exit.

VICE CHAIRMAN HART: Yes, Mr. Talpins?

MR. TALPINS: I can tell you that years ago I saw data that the average traffic fatality costs about a million dollars in this country by the time you add the investigative costs, the cost of incarceration, the medical costs and everything else that goes along with it. So as we deter this kind of conduct and reduce the number of fatalities obviously it's going to save society a lot of money.

One thing that I would also throw out there which has not been mentioned and has always greatly disturbed me when we look at traffic crashes in general, but DUI crashes in particular, is we tend to focus on the fatality numbers. The reality is for every one person who's killed there's between 30 and 50, depending on which statistics you want to by, between 30 and 50 people who are injured, many of whom very seriously.

And I think we're remiss when we discuss the problem in terms of the 10,000 instead of the hundreds of thousands, so I just thought I would throw that out there because not only are you saving money by reducing fatalities, but you're also saving money and, frankly, saving lives by addressing the people who would be hurt as well.

VICE CHAIRMAN HART: Thank you. Anybody else commenting on that? Yes, Mayor Mulder?

MAYOR MULDER: I'm looking at some of the statistics that the police department did and the last thee years we have had decline of DUIs and what happens if it results in an accident, road closures. People are rerouted. People are late to work. And it would be an interesting question.

I don't know how you could ever capture that, but I'm sure there's a great deal of financial loss if someone ever was able to track it, but I don't think it's measurable. There's not one unit that would be able to compile it all, but obviously they were talking about all the postponements and you're taking officers off the street that cannot respond to a robbery or something like that.

VICE CHAIRMAN HART: Okay. Thank you. Yes, Mr. Griffin?

MR. GRIFFIN: As part of our fifth anniversary of our campaign to eliminate drunk driving which was held last fall we had Ted Miller from the Pacific Institute for Research take a look at what the actual cost of drunk driving was in the United States, and he came up with a number of $132 billion a year. So when we talk about things at MADD like ignition interlocks, when we talk about things like the DADSS program, and we have legislation that's pending that would authorize federal dollars for that, we feel like the $12 million that's in that authorization bill is a drop in the bucket and is a really good return on taxpayer investment for what the total cost of the drunk driving problem

is.

VICE CHAIRMAN HART: Okay. Thank you. That's very helpful. Just one point I'd like to throw out there and that is my experience with aviation which is what I'm most familiar with. In aviation they deal with this issue by having the same two kinds of things. If you're under the influence, then that's a violation, if you're above a certain BAC, and in that case it's .04, but they have a third one that I haven't heard anybody talk about and that is you can't consume alcohol within -- in less than 8 hours before you go fly an airplane, and I just throw that out.

That would be a huge difference for this community, but I just throw that out as one of the reasons why the program is as successful as it is in aviation, because they have not only the two that we see in driving, but also the third one which is no consumption within 8 hours, bottle to throttle as they say.

Thank you again to everybody for coming. I appreciate all the help you've give us to address this difficult problem.

CHAIRMAN HERSMAN: Dr. Taylor was on an earlier panel for those of you who've been here the whole time and he talked about the advertising that was done, and I wonder if anyone on the panel here can talk about what the advertising budget for alcohol is. Ms. Hackett, I know that they don't have a good advertising budget for illegal drugs, so I won't ask you the same question. Mr. Blackman, Mr. Bodnovich, Ms. Saunders, anyone?

MR. BODNOVICH: I can speak for retailers who aside from

advertising their weekly specials in the newspaper or potentially, you know, an event at a on-premise establishment beyond that don't particularly advertise. That's largely the extent of that from the retail perspective.

CHAIRMAN HERSMAN: And so on the retail side do you know what they're spending?

MR. BODNOVICH: I can look into it for you. I don't off the top of my head.

CHAIRMAN HERSMAN: Sure. Mr. Blackman?

MR. BLACKMAN: I don't know. Number one, the Century Council membership is only a subset of all of the distilled spirits producers. But, number two, the Century Council's mission, which is fighting drunk driving and underage drinking, is not keeping track of the commercial expenditures in terms of advertising or promotion or things of that nature, so I'm afraid I don't know.

CHAIRMAN HERSMAN: Okay. So with your focus on fighting underage drinking I'm looking at some statistics from the Center on Alcohol, Marketing and Youth from Georgetown University, and they've identified that exposure to alcohol advertising on television in the U.S. increased by 41 percent for youth between 2001 and 2005. Looking at radio advertising, more than two-thirds of the youth exposure to alcohol advertising came from ads placed on youth-oriented programming. Is this an issue if we're trying to fight underage drinking, that people that maybe were in Ms.

McMahon's position are targeted to think that's a good idea?

MS. McMAHON: I think that it doesn't help. Also now you see all these different types alcoholic drinks and I think that it's targeted for kids. For example, you know, cotton candy vodka. Whether, you know, you are old enough to realize it or not, cotton candy is really good, and for someone who is young, especially maybe someone who is maybe going to put themselves in a position to indulge in drinking alcohol, that looks very appealing.

So in terms of you know, they have whipped cream and, you know, whipped cream vodka, but they also have whipped cream that has vodka in it. So, you know, that's something else as a young person, you know, you use to put on your sundae, but now it's, you know, been taken over by, you know, alcohol.

So I think in terms of advertising, that's really a target to young kids because, like I said, you know, having those delicious flavors and all these things, watermelon vodka and all that stuff, it's appealing to a younger audience.

CHAIRMAN HERSMAN: Mr. Nelson?

MR. NELSON: I just wanted to make a comment of an observation just from a public health communication standpoint that in a lot of the advertising that I have seen for the alcohol industry a common message is drink responsibly instead of drive only while drug and alcohol free or don't drink and drive, and it's a subtle difference, but I think it's important. It's

something that I would encourage the industry to consider.

CHAIRMAN HERSMAN: Ms. Saunders?

MS. SAUNDERS: If I could make just a brief comment. I do not have the actual numbers, although I can get them, for the malt beverage industry in terms of how much is spent on advertising. Our members clearly do advertise and they advertise a lot, but it might be useful for you to know two facts.

First, there is a voluntary industry code that our members follow with respect to their advertising and one critical element of that code is the placement of advertisements, and our advertisements are to be directed to adults of legal drinking age. In making the media selections they follow a standard established by the U.S. census, the every 10-year census, and that standard is that they will not advertise on programs unless the measurement of the audience is consistent with the measurement of the adult population in this country.

The last census figures that came out just about a year ago show that the population of adults 21 and older in this country is 71.6 percent, meaning that 71.6 percent of the people in this country are over 21, and so the media selections they make use that number as the base. They only advertise in those outlets where there is demonstrated evidence that the audience is 71.6 percent or higher legal drinking age.

The second thing that might be useful for you to know is that the Federal Trade Commission has done a regular study of

advertising in the alcohol industry. There is one going on right now. They select 14 different companies, some distilled spirits, some wine, some malt beverage, and those companies provide information about their advertising, not only where they advertise, but the particular target audiences. And there is a study going on right now that involves the collection of that data. The data is due to the Federal Trade Commission in June and there was a *Federal Register* notice with very detailed information about what they're asking for from the companies.

The studies that have been done in the past have found fairly consistently that, just as the distilled spirits companies follow their code, the beer companies follow the code that we have adopted on behalf of the Beer Institute, the same for the wine companies.

CHAIRMAN HERSMAN: Member Sumwalt?

MEMBER SUMWALT: Great. I think this has certainly been a great 2 days here, a lot of great information, a lot of great dialogue, and an all star cast of panelists who've been with us, 40 panelists over the last 2 days, so thank you all for your participation.

You know, I've tried to think about what have I synthesized in the last 2 days and I've sort of got some bullet points and I'm just going to go over them.

I think yesterday at the very beginning we heard that any amount of alcohol or drugs is impairing and the fact that .08

is there, that's just an arbitrary number that was decided through more or less the political system, and, again it's not just a 0 or a 1, it's -- you can be impaired anywhere between 0, 0.0, and 0.8, and anywhere in there, so it's not just like if you're .05 you're not impaired. Impairment comes anywhere in there.

Another thing that I've synthesized from this is that there really are -- and I've known this, but it's just shown it once again, that there really are a lot of dedicated people and organizations working on this problem. There is no single solution. There's no magic bullet. And the problems and the solutions are not monolithic. We need the laws. Enforcement and the sanctions must be certain, swift and severe. We heard that a couple of times yesterday.

We need good public education programs, good laws and strong visible enforcement, but we need something else and we talked about that today and that is the technology. Like so many of the issues that we're facing these days in the transportation community, we're learning that there's great promise for technology, and right now we do have ignition interlocks. That's technology that is available. But somewhere down the road we've got -- the DADDSS looks really promising. We saw two versions of that today.

And just in thinking through this at lunch, you know, my wife's car, your car, Madam Chairman, you're not my wife, but your car, I suspect, has a push button. My wife's car has a push

button to start it. A lot of cars have that these days, so it can be transparent to the user. It's built into the car. You go to start your car and there is it, you push the push button. It detects whether or not you've got alcohol or drugs in your system through some means or another, and that will be transparent just like we've got airbags in our cars right now. We don't know they're there, but they are there to protect us. The manufacturers have built them in and that offers a lot of promise. Dr. Michael said the technology offers an efficient solution to a complex problem.

I think the focus, and I want the NTSB to hear this because I think that we've been focusing on the hardcore drinking drivers, that is an issue, but there's a lot more out there, so it's part of the problem, but I want our focus to be all impaired driving and not just hardcore drinking driving because that has been a focus area.

Another thing that was made a point of is that impaired driving is not just a ticket, it's a crime, and we need a societal change towards that criminal behavior. We heard earlier that there has been that societal change, but I think some of it has changed, but not for everybody. If it had changed with everybody we wouldn't still be here today. So we've got a lot more to go there. So all of these things together, the technology, the enforcement, the education, enforcement, the laws, all of it's going to work together. I've picked up on the fact that drug

driving is definitely a problem and it is increasing. A lot of my focus has been on the drunk driving, but drug driving is definitely an issue.

We've heard that we need greater use of DUI checkpoints, and one thing, and probably the biggest point for the 2 days for me as an NTSB Board member, is that the NTSB does have a role in solving this problem. We have the bully pulpit and we must do something with it. We have been doing something, but we need to do more.

And I don't want this forum to be just a standalone where it's a standalone forum where the chairman throws the gavel down and we walk out of here and we say well, that was great. I want this to be the springboard for a renewed focus on this problem for all of us. I know that we're all focused on the problem, but I want additional focus on it for the participants, for the staff and for my colleagues on the Board.

And, in closing, I want to thank the staff for all of your great work. I know these things don't just happen. The briefing book, as I've told Stephanie and Danielle, the briefing book's been great. Member Rosekind, I want to thank you for your leadership. This is your advocacy area. Thank you. This is a great idea. And, Madam Chairman, as always I want to thank you for your leadership in allowing us to move forward with this and I look forward to joining with us all as we really charge out of here and really work together to be a part of the solution. Thank

you, Madam Chairman.

CHAIRMAN HERSMAN: Member Weener.

MEMBER WEENER: No questions.

CHAIRMAN HERSMAN: Member Rosekind.

MEMBER ROSEKIND: Well, I'm going to start by saying, you know, I'm so pleased. Member Sumwalt's going to be the first visit we have after the forum to talk about all the concrete stuff we're going to do to make sure we get real product out of this meeting, so you'll be the first visit to make sure we move that forward.

I also want to acknowledge -- Mr. Talpins, I think, actually asked a question about besides lives lost which are critical what are other measures we need to look at. You were one of the first folks to rally bring up, you know, for the 10,220 lives that are lost you're looking at 300- to 500,000 depending on the numbers of people injured and those lives and those families are changed as well. And I think the other part that you mentioned that people are talking about is that there's a big economic issue here, whether it's about paying for programs and the other things. And, you know, when you talk about how do we get the police officers out there those are fiscal issues, you know, and they've got to be part of the discussion of things.

So I have just two quick things I was interested in. One is, Dr. Michael, I think you're the first one of people who have talked about this who actually explicitly said there's near-

term and there's long-term. You kind of talked around that, but I'm kind of curious from the group that's here if you had to identify the near-term strategies that you think pretty much everyone would agree you need to get done now what would those be? I have Member Sumwalt on record, so I'm just curious. Please.

DR. MICHAEL: One of the items for the highway safety offices across this country, state and territories, is that there's funds that come to us that are in the impaired driving area. And something that some states have put in place is that if you're an officer involved in receiving overtime to go out and do an impaired driving enforcement, you will have had the basic field sobriety testing battery or an update within the prior 36 months so that when you are dealing with the prosecutor and you're dealing with the Court you know what you are doing.

If you're using passive sensors or you're using a camera, if you understand how that equipment works, how to put on record appropriate information of what you saw as probable cause and as you walked through the stop with that person that you've pulled over to the side of the road so that when something does occur it's brought forward fully and completely and we don't end up with gaps and stops and hiccups because the officers that are out there putting their lives on the line day in and day out are doing the right job and doing it well.

MEMBER ROSEKIND: Mr. Blackman.

MR. BLACKMAN: I would say that in the near-term it's

really what we've called judicial education. Whether you're reacting to somebody who had 13 offenses or whether you're reacting to somebody who has a first offense and was dealt with in either a too harsh or too lenient manner that tends to happen in the courtroom. The judge is not in their by themselves. There's a prosecutor, there's a defense attorney, there's a policeman, there's a whole line of people, but at the end of the day we find that judges really are looking for opportunities to learn more about what's going on outside of their own little courtroom and microcosm of their community and many judges, in fact, don't really know what the most up-to-date science is, don't really know what's the most up-to-date information in the evaluation of techniques and tactics and opportunities that are out there in their courtrooms, whether it's 24/7 from South Dakota or whether it's the right use of interlocks along with treatment opportunities that tie together and can achieve what we're all looking for. So, for us, my perspective would be, again, in the near-term as well as long-term. It's really judicial education.

MEMBER ROSEKIND: I have another question I'm going to ask, so you get a moment, but keep that attorney piece in check. Go for it.

MR. TALPINS: It's always very hard to do. DADSS has great long-term potential, particularly with regard to alcohol. I'm very skeptical that they'll be able to design a system to test for drugs. As Bob DuPont explained, there's just so many and

behavioral cues are way too soft for that kind of an application I my mind, so let me focus for a second on the soft-term solutions or the short-term solutions. Excuse me.

One is, again, identifying everybody who is a drugged driver. In Miami we're planning on setting the example for the country by testing every single person who's arrested for DUI regardless of their BAC. I think that is an absolutely critical step. It's something we're going to prove is cost-effective by using screening tools at roadside in Miami and I would encourage the Board to keep up with what we're doing in GHSA in particular as well so that we can expand it nationally.

MEMBER ROSEKIND: That was it, which is why --

MR. TALPINS: I quit.

MEMBER RISEKIND: That's right. I just -- the last question I want to ask is it's been so informative over the last couple of days and I'm kind of wondering in your experience in your heads out there is there a need for some big, bold, new innovation -- that was the near-term stuff. Is there a need for some big, bold, real innovations and changes in any area, technology, any area, and I'm done with my questions, so I'm curious from you what have you got out there, what's new and different that people could be talking about for Mr. Griffin and the mayor.

MR. GRIFFIN: Just real quickly, I mean what could be bigger and bolder than DADDS, what could be bigger and bolder than

a car that can detect whether or not the driver is drunk and would stop that driver from getting behind the wheel, and I would again in my testimony, but again urge the Board to get behind this technology. Member Rosekind, you've been excellent on this issue. You've gone up to the lab. You've seen the technology firsthand. I would encourage the Board to get behind it and also to support the federal legislation to the extent that it can to get this program authorized and let's get this technology developed so that it doesn't take as long to get it out on the street. I know -- I think from MADD's point of view every parent in America's going to want this technology. And we just really see the short-term ignition interlocks and the long-term DADDS and we think we can eliminate drunk driving in America.

MAYOR MULDER: Pharmacists came up yesterday. In talking to my prosecutor just a day ago he -- I told him I was coming here and he said well, you better tell them about the new thing and it's drugs and it's different chemicals, that the kids are fearless.

And two things and I'll be very brief. One is the favorite kind of party is everyone's supposed to bring some kind of pill and they throw it in a bowl and everybody -- you know, and everybody takes one and they have no idea and they kind of wait around and see what's going to happen. They're stealing them by going to visit homes and they want to go to the bathroom. They go and open somebody's medicine cabinet, pull out a pill so they have

something to take to the party, number one.

Number two is the alcohol found in the hand sanitizer. He told me everybody's mixing it with fruit juice, orange juice, grape juice, and they're drinking it. Kids are so innovative, but frightening so because they have no idea how their body's going to react to it.

MEMBER ROSEKIND: Okay. Thank you again, everybody, for your candor and thoughtfulness.

CHAIRMAN HERSMAN: Vice Chairman.

VICE CHAIRMAN HART: I just have one more question I'd like to throw out there. In the last 2 days we've been hearing we're stuck on a plateau, if we keep doing what we've been doing we're going to keep getting what we've been getting, so what can we think of out of the box which is just what Member Rosekind said again, and I've been fascinated in the last 2 days to hear some out of the box thinking, but one of the things I want to do is commend Representative Pauls for bringing that collaborative approach to the table and I want to just give an example that in the airline industry, again in my expertise in aviation, the aviation community in the mid-90s was very concerned that their accident rate was going to be shocking to the public because the accident rate was stuck on a plateau, but the volume estimates were that the volume of flying was going to double in the next 10 or 15 years and the concern was if the simple arithmetic tells you if a flat rate times a double in volume happens then the public is

going to see crashed airplanes on CNN twice as much and that's very, very scary to that industry.

So they said we have to do something out of the box to get off this plateau and what they did was a collaborative approach where they brought together everybody who's got a dog in the fight to work out these problems, to identify, to prioritize, to solve and evaluate these solutions and it was an amazing success story because in only 10 years they reduced their fatal rate from what was already considered exemplary, they reduced it by another 65 percent in only 10 years.

So my question to you is -- I mean that was an amazing collaborative example, Representative Pauls, that you brought to us to tell how everybody who had a dog in the fight got together to identify, prioritize and solve and evaluate, and I would put that out to all of you. First, if you have any more comments, Representative Paul, I'll throw that out to you. Do you any of you know of any other examples of that collaboration because that's -- because when everybody who's got a dog in the fight is there then what comes out of that process everybody's got an ownership interest in and they do it willingly and it works. So I throw that out again.

REP. PAULS: I'd like to say one thing that we found which was interesting, the first time interlock, the reason we think ours is working so well is that we removed it from the courts. It's an administrative procedure now. And that took the

pressure off the courts. They had been able to use that as a sentencing tool for years and years. Nobody hardly used it. And so now it's part of the administrative process. Of course, there is the appeal process and such that can still deal with that, but that's a major change we found and it was interesting because it was accepted without really any discussion. I think the judges were probably glad to get out of the middle of that because if they didn't order interlock and someone had another crash then they looked bad, but if did he order interlock then there's a lot of discussion about costs, hardships on the family, et cetera.

VICE CHAIRMAN HART: Right.

REP. PAULS: And so in a way that first time interlock saved us all the additional costs we would have had on educating judges on patterns of addiction and educating prosecutors, et cetera, when they asked for it. We just mandated it in effect.

VICE CHAIRMAN HART: And that was one of the outcomes of your collaborative approach?

REP. PAULS: Right, right, in the DUI Commission. So the main reason we started the commission was because we were looking at having to build a new prison because we wanted to put fourth and fifth time DUI violators into a prison with treatment. And then as we were discussing it we found a lot of those people had never had any adequate treatment along the line. So then we thought instead of waiting to ruin someone's -- have a death that ruins a life and then ruin the driver's life also why not start

doing an earlier intervention.

So we kind of had thought initially maybe part of the DUI Commission would be a strong recommendation for a separate prison, adult only with alcohol violations or drug violations, but we changed our focus.

VICE CHAIRMAN HART: Well, thank you. And, by the way, I would note that in aviation it was the same as she described, that these parties had competing interests and it was hard to get them in the sandbox together and they were -- you know, just like she described it, they finally realized that if we do this together better it could be a win/win as opposed to protecting our own silo. Yes, Mr. Blackman?

MR. BLACKMAN: Well, only a comment on your lead-in which is there has been no representative from the automotive industry here, so all the things that we're talking about doing to cars, with cars, involving cars, in fact, the automobile industry doesn't seem represented and, quite frankly, often don't get involved.

VICE CHAIRMAN HART: Mr. Costales.

MR. COSTALES: Two very quick examples to your question. First, the state of Hawaii brought together a task force and that's how they went forward with their ignition interlock law and it included all of the counties, all of the islands and people together to move forward.

Secondly, in the state of Oregon we've had the

Governor's Advisory Committee on DUI since 1983 and they've worked through multiple issues, the most recent with medical marijuana in our state. Officers were seeing people on the side of the road pulling out a medical marijuana card saying this is my license, you know, my get out of jail free ticket, card, and the officer would say no, that doesn't give you the right to drive under the influence. And so the Medical Marijuana Program director came into that group and they now have changed what it says on the card and what it says on the application, that this does not give you the right to be under the influence of medical marijuana and be behind the wheel of a vehicle.

VICE CHAIRMAN HART: Thank you. Mr. Griffin.

MR. GRIFFIN: Yeah. I just wanted to take issue with Mr. Blackman's comment. I think that the auto industry actually were represented here earlier today by Bud Zaouk who's part of the Automotive Coalition for Traffic Safety in the DADSS Program, and I think the auto companies have done a good job. They're the ones who've ponied up $5 million for the Cooperative Research Agreement for a problem that, frankly, Mr. Blackman, their companies didn't create. The companies that fund groups like the Century Council did create that problem, so I take issue with that and just wanted to respond to that. Thank you.

VICE CHAIRMAN HART: And Ms. McMahon, and then my time is out, so I don't know if I can -- Ms. McMahon?

MS. McMAHON: I'm sorry. I just wanted to make a

comment to treatment. I think that it would be a lot more effective, especially for youth. And part of being an outpatient I was put into a room with people that are similar to the ages of all of you around me and they really just had a video from the 1950s, you know, with the purple elephant in the room and it was what are your triggers; see you later, goodbye. So I think that personally that was why in terms of treatment it wasn't effective for me. Had I been in an area where I was with offenders like myself, with people who are maybe of my age, it would have been a lot more effective, so --

VICE CHAIRMAN HART: One more. Yes, Mr. Nelson, and then I'm through.

MR. NELSON: Sure. I just wanted to make you all aware that AAA is in the middle of the development process of pulling together sort of an advocacy toolkit for our clubs to create basically what has happened in a handful of other states including the names of people within the state that should be invited to that first meeting and an analysis of the loopholes that exist in that state to provide a starting point for that group for their first meeting, so we recognize that it is an opportunity, too, and we're in the process of trying to do something about it.

VICE CHAIRMAN HART: Thank you very much.

CHAIRMAN HERSMAN: I wanted to follow up and, Mr. Blackman, I think we want to give everybody a chance to respond. I saw your hand was up. We're doing okay on time.

MR. BLACKMAN: Well, I have two issues I'd like to discuss. First of all, I didn't get a chance to respond to your own question about advertising and its influence on underage drinking and I would just make two quick points which is that during the time period, for a long time period that you're talking about in terms of increased advertising, in fact, underage drinking measured by 12th grade, by 10th grade and by 8th grade have all gone down. So there is always analysis to be done, but on the face of it I'm not sure that you can correlate increased advertising with underage drinking because they're going in opposite directions.

Number two, in both our research as well as research that's been done for more than 10 years in terms of the leading influence on youth's decisions to drink or not to drink, the leading influence is always an overwhelmingly parents. And often then, depending on age followed by peers, that influence that they see in the media or see in advertising is very, very, very, very far down the list.

Secondly, I don't think that you brought everybody together to harp on each other and where there are disagreements there may be disagreements. The same question that you asked regarding advertising and underage drinking, you know, my sense is that the automobile industry's advertising budget is much larger than the $5 million that they've put into this effort over the course of 3 years, I believe. But, again, whatever everybody

does, everybody does because they believe it's a priority to them or it's not a priority to them and everybody makes their own decisions. So I didn't come here to engage in that kind of conduct, and so I appreciate you at least recognizing me.

CHAIRMAN HERSMAN: Okay. And so let me begin my questions. I'm sorry. I thought you were trying to respond to the Vice Chairman, but that's okay.

You made a statement in your opening talking about technology. I think you said solution du jour or something like that. I may have paraphrased you incorrectly.

MR. BLACKMAN: That's exactly correct.

CHAIRMAN HERSMAN: I just wanted to understand. And also Mr. Bodnovich who's sitting next to you I think said technology alone, even if mandated by the government, won't be effective if --

MR. BODNOVICH: In the long-term if implementation rates remain as low as they are today. It's not being used.

CHAIRMAN HERSMAN: Yeah. Okay. So I wanted to ask both of you just because I'm not exactly sure when you talk about technology what did you mean by that when you say that the technology is the solution du jour, that it won't be effective? What technology are you talking about?

MR. BLACKMAN: I'm talking about technology overall. The fact of the matter is that --

CHAIRMAN HERSMAN: Can you be specific?

MR. BLACKMAN: Sure. Well -- sure.

CHAIRMAN HERSMAN: I'm not trying to be dense. I just wanted --

MR. BLACKMAN: No, no, no, no, and there's a variety of technologies. The 24/7 Scram, the ignition interlock, home monitoring, DADDS. There's a variety of technologies that are out there.

We actually provided the state attorney general in South Dakota with the seed money to begin the 24/7 Program up there. The use of technology as a solution and as the solution du jour, as that's the answer to all of our problems, I'm not talking about a specific-- excuse me, of all of them, it seems as if, you know, a few years before that it was we're going to take the license plates away, a few years before that we're going to impound the cars, and there does seem to be over time a sort of solution du jour as drunk driving sort of moves from phase to phase to phase and over the last period in our opinion it's been technology, technology that we support, not being critical of it, but only being critical of its overwhelming only one single solution potential.

In fact, we do support the DADDS program. We have supported Senator Udall since the beginning of that program. We supported it when we were a member of the campaign to eliminate drunk driving before we were released from that commitment, so --

CHAIRMAN HERSMAN: Okay. So it sounded like you support

the technology. You're not specifically saying that technology doesn't work, but you're saying all the other pieces have to be there, too.

MR. BLACKMAN: That's correct.

CHAIRMAN HERSMAN: Okay. So --

MR. BLACKMAN: We're suggesting it's not an only solution.

CHAIRMAN HERSMAN: Okay. Is there anything specific about the technology that you think is a problem because I think from our perspective we're trying to figure out what's next, what do we need to address, what -- you know, what's on the horizon because I think a lot of people understand what's working now, so if it's not working that's what I'm interested in.

MR. BLACKMAN: I think it's conditional, as I said also. It's not that it's not working, it's not that -- it doesn't solve the problem by itself. So, for instance, when you look at the ignition interlock, the ignition interlock tied with treatment opportunities and assessment opportunities may, in fact, bring about that behavioral change which is more than just the interlock on a car for a certain period of time. Then, of course, the data suggests that once that interlock is off some people begin to recidivate again. So what we're suggesting is that the technology, valuable, productive, effective, but not the ultimate end solution by itself.

CHAIRMAN HERSMAN: Mr. Bodnovich, is that about the same

sense that you had?

MR. BODNOVICH: Well, I don't know if I can be quite as eloquent as Ralph, but yes, he hits on some major points. Member Rosekind talked about the fiscal issue. I think that that's a concern. You know, if you pass along you require something, but there's no implementation, there's no enforcement, I don't know what kind of good that does in the long term.

We hear about mayors who have to cut budgets for police officers. We talked to the people at the American Parole and Probation Association about the costs of -- on what it would mean in terms of resources for their members and for people who are charged with monitoring and enforcing these individuals.

I'm not -- you know, we're not Luddites. It's not a matter of, you know, technology is bad. I just think it needs a reasonable application, and in some states they've made that work with all offender interlock legislation. I think in other places people are taking a look at the budgets, they're taking a look at their resources, and they're also incorporating in all these other things we've discussed, whether it's looking at an offender's profile, are they on their eleventh offense -- still to this day I don't know how that happens -- or is it a first offense? What profile do they fit? What is the proper treatment and what is the proper assessment; what is the proper sentencing that's going to, again, have a long-term impact?

CHAIRMAN HERSMAN: Okay. So not necessarily a specific

problem with the technology, just more that it's a part of the --

MR. BODNOVICH: I think it's part of the solution and we also have to be mindful of its application, it's implementation, and the follow-up with it. Again --

CHAIRMAN HERSMAN: Okay. So yesterday we heard one of the panelists talk about that some people actually might need really long-term or even lifetime monitoring because I think that's one of the challenges with the ignition interlocks, they go away after a period of time, and we've also seen people try to work around them.

I just gave a speech last month where I recognized that there was a previous arrest for someone who actually had killed some folks and they had an Ignition Interlock Order, but they transferred title of their car to someone else to avoid the interlock and then 2 years later they had an accident in that vehicle and killed somebody, so I recognize it's not foolproof, but when you look at people who are hardcore recidivists, have a problem, do you agree that maybe some people need long-term or potentially lifetime?

MR. BODNOVICH: I would agree with that. I think there are some people that don't need to ever visit any of my members' establishments, and I think that's about as strong a statement as I can make when it comes to people I represent in their businesses. I think there's definitely recognition that there are individuals who are better off without any -- using alcohol at

all.

CHAIRMAN HERSMAN: Okay. The staff have some additional questions, so we'll go to the staff before we close.

MR. BLACKISTONE: Thank you, Madam Chairman. Yes, I have one question. I believe Ms. Roeber and Ms. Davis each have one question.

I wanted to follow up on the question that I asked Mr. Griffin, and this goes somewhat to the questions you were asking, Madam Chairman, regarding what happens after the ignition interlock. I had asked him what additional steps are needed to ensure that the behavioral change lasts after the interlock was removed, but I didn't have an opportunity to ask other people on the panel what their thoughts are about that. What beyond ignition interlocks needs to be done, what should agencies be doing to make sure that behavior changes once that period is up? Mr. Nelson. I'm sorry.

MR. NELSON: I mean, I actually agree that for somebody who's been through a screening to determine whether or not they have a problem with alcohol or with their substance of choice that pairing monitoring or an interlock with treatment and actually providing data from the interlock, for example, to the treatment provider can help them identify and ask the right questions to help make their treatment more effective. I'll stop there. If you have more questions I'm happy to answer.

MR. BLACKISTONE: Mr. Talpins and then Ms. McMahon.

MR. TALPINS: I love the interlock device. It's a wonderful device. But what it does, it separates drinking from driving. If we made cars that were able to determine whether or not somebody was impaired and it ended drunk driving, but still had 300 million alcoholics in this country I would not consider that a complete victory or even close because my interest extends to all of criminal justice and also public health.

The reality is when interlock devices come off all of the research I've seen with one exception shows that people return to exactly what they were doing before, so the question's a great question. The hole is filled by appropriate screening and assessment either through the assessment tools that Ms. McMahon went through, but also through the use of objective scientific technology like continuous alcohol monitors, twice daily breath testing, at home breath testing and things of those like.

Those devices which force people to remain sober or relatively sober for a period of time address the root cause of the problem. That's why we know DUI Courts and programs like it are so darn effective, because they're not just preventing somebody from drinking and driving, they're actually addressing the problem drinking. The problem isn't the alcohol, the problem is the human being who's consuming it. That's the reality.

MR. BLACKISTONE: Thank you. And, finally, Ms. McMahon. Then I'm going to turn the questions over to Ms. Davis.

MS. McMAHON: I wanted just to say like on behalf of my

situation a simple answer to that question is fear. Going through everything I went through and having complied with everything and giving letters of compliance to the Court, had another traffic violation happened to me within -- even now as I stand now because it's only been 4 years, I would be in jail, so unless you do, like we have spoken about, have a really intense problem with alcohol, but in terms of someone who has made a bad decision like myself I know if that were to happen now that my life would be over, so that's really my answer in terms of, you know, going forth.

MR. BLACKISTONE: Thank you very much. I appreciate that. Ms. Davis, your question?

MS. DAVIS: Ms. Hackett, could you describe for us briefly the use of synthetic drugs with street names like spice, bath salts and K-2, and can you describe how these drugs are made and how common they are in drug driving?

MS. HACKETT: I don't have that information with me today, but I can refer one of our experts on synthetics from the office to provide materials for the record. A lot of the data that we've seen on drug driving does not necessarily specify what drug the driver was using. We can look at some of the information that came from NHTSA, including the National Roadside Survey which broke down illegals and medications.

And one of the issues with synthetics is that the drug is always changing. The analog is changing and that's how a lot of times people are able to get around legislation that's been put

in place to restrict the sale of synthetic drugs, but I'm happy to provide more information for the record on that.

MR. BLACKISTONE: Thank you, and we appreciate you submitting something. Ms. Roeber.

MS. ROEBER: I'd like to make the final question for Dr. Voas, and in some respects it's really more of an opportunity for a statement because I feel that at the end of the 2-day forum getting the wisdom of somebody that's been doing this for 40+ years -- so, you know, what would you say the Board really --

CHAIRMAN HERSMAN: I'm sure it hasn't been that long, Danielle.

MS. ROEBER: I'm only using his slide that said he started at NHTSA in '68. But I'd like to know, you know, with your wisdom and knowledge on this subject what is -- what do you want us to know walking out of this room?

DR. VOAS: Well, I think that we have a number of opportunities from these technological solutions. One point I'd like to make on this matter of learning under the interlock, my colleague, Marcus, has just shown that people on interlocks not only learn to reduce the number of lockouts, that is they change their driving behavior, but they preserve their drinking behavior. That is they consume as much at the -- during the project as they did before. So the interlock is achieving all of these conflicts. It is producing zero for people who both driver and who drink.

Now, it's doing that in part because we're keeping them

in a straightjacket if you like, and that does, to me, really focus on this issue of having done this to people who are a risk on the highway and that's why they got arrested. And now we put them through a process where they're able to control their drinking as well as their driving which is, I think, a very important thing because early on when we first started talking about drunk driving the concept of someone who was dependent on alcohol is that once they started drinking they couldn't stop and that you could not control their behavior short of essentially hospitalizing them and cure.

What's happening with programs like 24/7 is we're seeing that individuals who -- they clinically appear out of control on their drinking are at least for this period of being under control able both to maintain some drinking with the interlock, a good deal, perhaps with 24/7 less, and also change their driving. In other words, they're able to adapt to what we need to have American be which is to separate drinking from driving, and we've shown we can do it with the most difficult cases.

Now we're doing it in a way that probably would not be acceptable for 100 percent of American drivers, but I think we ought to look at it as a really good sign to show that it is possible to take even people who are -- have built alcohol into their lives to the point that it's controlling them, we can take these people and if we put them under proper controls they can both keep drinking, but also not do impaired driving. They can

separate the two. And we need to try and take advantage of this, not just for that group because we know that's a small group.

We know that the majority of the drinking drivers are not arrested, but we can ask the question if we can achieve it for this worst group, how about seeing what are the factors in that and what are the principles in that that we might be able to transfer to all of those people we don't arrest and as a result they kill themselves and others. I think that's a really interesting challenge that faces us.

MR. BLACKISTONE: Thank you. Madam Chairman, that concludes our questions.

CHAIRMAN HERSMAN: Thank you very much. Thank you so much for this panel. I don't think we've ever had a panel this large and I think, as Ms. Pauls was talking about, it was really great to get everyone on the same panel together, so we really appreciate you all being here with us and sharing your insight. Ms. McMahon, thank you for showing us that there is opportunity that comes from adversity, so thank you for being here.

All of you, thank you for your comments, for being straightforward and honest. Everybody doesn't want to hear the same message and so we appreciate you sharing your perspectives with us. It is important to get all of them on the table as we're beginning to take that information back and as Member Rosekind and the advocacy team are going to be evaluating everything that we've heard. We have some products that are in the works, the Wrong Way

Drive Study that's going to be coming out in December that our highway team has been working on and some other activities and we will be sure to keep all of you informed as we move ahead.

All of our panelists were fantastic. We very much appreciate our exhibitors who were here as well in the outer rooms, but also during lunch, and our presentations and the films that were shared with us.

Thank you to all the advocates who have really hung with us and stayed in the audience for these two long days. We appreciate your presence. It's very important to us. And thank you very much to the NTSB team. We are excited about the opportunities go ahead and I think we've all learned a lot in the last 2 days.

I think, Dr. Voas, it was great to hear you close out things. You have certainly been a leader in this field and it was Dr. Watson from Australia who actually said you had signed off on his Ph.D., and so you have created not just the work that you've done yourself, but a legacy that lives on in people who are inspired by the work you do, so thank you for being with us.

This issue has been on our Most Wanted List for many years. It's an issue that we care deeply about here at the NTSB, but as I mentioned to the advocates that I met with in the beginning of the event, this is an opportunity for us at the NTSB to hold up a mirror and look at what we are doing and ask ourselves is it enough, are we doing the right things? And, yes,

the answer should really be as simple as don't drive after you've drank -- after you've been drinking or doing drugs. But, as we've discussed today, when someone makes a bad decision the complexity of the interventions really depend on the offender.

And this is more than just addiction. There's been so much focus over the years on the hardcore drinkers, but they are not the only ones who are driving impaired. Many people, too many people, are making bad choices, choices to drive impaired, to ride with those who are impaired, to allow people who are impaired to get behind the wheel. We are all responsible for the society that we live in through the words that we use, through the decisions that we make and the actions that we take.

One thing is clear from our discussion over the last 2 days, getting to zero is going to be a tremendous challenge. As many panelists observed, impaired driving is complex. If the solution to the problem was easy we wouldn't be here this week.

We've heard from many people working very hard every day in their fields to address impaired driving. However, everyone also acknowledged that even though a lot has been accomplished that we continue to see too many needless tragedies, more than 300,000 lives lost since we investigated that crash in Carrollton, Kentucky, each life precious, each crash preventable.

We must continue to question if what we are all doing collectively works, if the consequences of impaired driving are certain, swift and severe. Some interventions have demonstrated

success. We need to support and expand those efforts.

In other areas we need better data or new efforts such as what we've heard about drug driving, but there is also great promise in technology that can offer universal solutions to separate the impaired from their vehicles -- Dr. Voas, I wrote this before you said it -- to prevent the alcohol impaired driver from endangering others.

In my opening statement yesterday morning I talked about the lives lost in the Carrollton crash, about Mary Katherine, Anthony and Shannon. For Mary Katherine, Anthony and Shannon and for all those hundreds of thousands of others who lost their lives tragically and senselessly and for the millions that are injured we must come together and say enough is enough. We stand adjourned.

(Whereupon, at 4:50 p.m., the hearing was adjourned.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: REACHING ZERO: ACTIONS TO ELIMINATE SUBSTANCE-IMPAIRED DRIVING

PLACE: Washington, D.C.

DATE: May 16, 2012

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

_____
Cathy Belka
Official Reporter