Committee Meeting

of

ASSEMBLY ENVIRONMENT AND SOLID WASTE COMMITTEE

ASSEMBLY BILL NOS. 409 and 2439

"Discussion on the implementation of the Phase II California Low Emission Vehicle program beginning in calendar year 2006"

LOCATION: Committee Room 9
State House Annex
Trenton, New Jersey

DATE: September 30, 2002
2:00 p.m.

MEMBERS OF COMMITTEE PRESENT:

Assemblyman Reed Gusciora, Chair
Assemblywoman Linda Stender, Vice-Chair
Assemblyman Upendra J. Chivukula
Assemblyman John F. McKeon
Assemblyman Larry Chatzidakis
Assemblywoman Connie Myers

ALSO PRESENT:

Carrie Anne Calvo-Hahn
Office of Legislative Services
Committee Aide

David Eber
Assembly Majority
Committee Aide

Thea M. Sheridan
Assembly Republican
Committee Aide

Meeting Recorded and Transcribed by
The Office of Legislative Services, Public Information Office,
Hearing Unit, State House Annex, PO 068, Trenton, New Jersey

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ASSEMBLYMAN REED GUSCIORA (Chair): Welcome everyone. My name is Reed Gusciora. I'm the Chairman of the Environment Committee. Just for homework purposes, the hearing is going to be not only transcribed over the Internet, but a hard copy of the testimony will be conducted as well, so that we'll all have a hard copy of this at the end.

I'd ask anyone who testifies, please state your name clearly and, if you could spell your last name, that would be helpful for record keeping purposes.

Other areas of housework, we're strictly going to hear two bills today, and they are known as the California clean car initiative, A-409 and A-2439. Assemblyman Kean who sponsored A-409 is not with us today, but he is in with spirit, and Assemblyman Ahearn will be here to testify on A-2439.

We are holding A-1065, the Kean-Stender initiative for air pollution sources in and around airports. We are also holding, for another day, A-2550, the cell phone disposal bill, as well as the four fuel cell bills. We're going to hear that at a later time.

So, with that, I'd like to introduce-- I'd also like to welcome my other members, and do we have to take a roll?

MS. CALVO-HAHN (Committee Aide): Please.

Assemblywoman Myers.

ASSEMBLYWOMAN MYERS: Here.

MS. CALVO-HAHN: Assemblyman Chatzidakis.

ASSEMBLYMAN CHATZIDAKIS: Present.

MS. CALVO-HAHN: Assemblyman McKeon. (no response)

Assemblyman Chivukula.

ASSEMBLYMAN CHIVUKULA: Here.

MS. CALVO-HAHN: Assemblywoman Stender.

ASSEMBLYWOMAN STENDER: Here.

MS. CALVO-HAHN: Chairman Gusciora.

ASSEMBLYMAN GUSCIORA: Here.

Okay. I'd like to bring up Assemblyman Ahearn for A-2439, and if he can speak kindly about A-409 at the same time, that would be great, as well.

Thank you.

A S S E M B L Y M A N M A T T A H E A R N: Yes, Mr. Chairman, I want to thank you for allowing us to have this hearing today, to get this very, very important issue aired -- not to use the pun. Certainly, both bills are identical in intent and purpose, and, yes, I have nothing but good things to say for the other version of the bill. I guess I'll anticipate the question: Well, why am I on my own bill and why did I do this? Simply, I felt that it was very important to me in my district -- for those that don't know, in District 38, where I come from is the place where all roads seem to lead to in New Jersey. We have U.S. Route 80, the New Jersey Turnpike, New Jersey Route 17, the Garden State Parkway, Route 4, and Route 46, all terminating in one way or the other and heading and moving traffic up into the George Washington Bridge and, also, all the traffic that tries to leave my district in Bergen County, in general, to go through the Lincoln and the Holland Tunnel, all those commuter routes.

Traffic is horrendous, and there are times, even on a nice, cool, clear day, where you can still see people sitting in their cars with the windows

closed up and the air conditioners running, and burning that gas that that takes, simply because the quality of the air is almost always terrible where we are up there. And I know it's a problem throughout the state. The Federal Government requires that we meet certain Federal standards for air, under the Clean Air Act amendments of 1990.

To my knowledge, even when that Act was put in place, New Jersey did not comply. There are several sources of air pollution here in our state. We get air pollution from our own industry. We get air pollution from the mid-west industries, and we have air pollution generated from motor vehicles. Of those three areas, the only thing that we can do, in general, to try and bring the State into compliance with Federal law is to have tougher standards for automobiles that are sold here in New Jersey.

Under the Federal scheme, the Federal preemption being what it is, we only have two choices with a few subchoices. Initially, under the Federal law, the Federal Low Emission Vehicle Program, which is currently in effect, clearly is not going to do anything to reduce air pollution and improve the air quality that we breathe here in the state, simply because we've already been out of compliance, and the program is just geared for a national average. It may work in Kansas and Kentucky and in those places, but here in New Jersey, I think we face a situation much more similar to that California faced several years ago when they took the lead on solving air quality issues.

Under the Federal scheme, California was allowed to take the lead and set separate standards. And because of what was done in California, much of the technology that we're now seeing in demand by consumers here in this

state and other places for lower emission vehicles, hybrid technology vehicles, it came from that concept.

And what both my bill and Assemblyman Kean's bill does is basically to set New Jersey in the direction of taking a tougher route. It's tougher on air pollution. It's really, I don't think based on the research that I've done, going to place any significant burden on consumers, on the State revenues, or even on the industry. In many ways, this could be very good legislation for the local technical industries and the auto manufacturing plants, and that type of thing. Because what the legislation does, in effect, would trigger in that, by 2006, we would have to have manufacturers -- and no obligation on the State. The State doesn't incur any obligation to make this happen. It's the auto dealers, manufacturers, to sell certain percentages of different combinations of vehicles that have a net effect of reducing emissions.

When you look at what's in the balance, and the balance here is maybe some resistance to change, you know, whatever it may be, what we have at risk is the health of our children and our senior citizens, in particular. This past summer and the past year's incidence of childhood asthma have just skyrocketed. I think there's clear connections between air quality and that illness. New Jersey is also -- people talk about we're first in a lot of bad things. Well, cancer rates is one of the areas that New Jersey is leading the nation in. There have been proven connections to various types of cancer and the pollutants that come from automobile emissions.

So again, I know there are a lot of people here that want to testify and want to present information to this Committee, so that we can then maybe -- not we, the Committee -- can then have some idea for what additional

information you might need and what other options, if any, that we have between the pure California-type system or some of the hybrid cars. There's also hybrid legislation out there. Maine, New York, Vermont, other states in the northeast corridor, all of whom are in noncompliance with Federal Clean Air standards, have already beaten us to the punch in terms of taking initiatives to improve the quality of air for their citizens.

I know this is only a hearing today and not a vote, but I would ask the Committee, through the Chair, to move forward on this issue with all due haste. This bill, my bill, has only been around recently. I'm a freshman. The other bill, which has huge bipartisan support, has been out there for quite a bit of time now, and I don't think we can delay it anymore, and we need to move this forward.

So thank you for the opportunity to speak this afternoon.

ASSEMBLYMAN GUSCIORA: Thank you, Assemblyman.

First I want to welcome Assemblyman McKeon, who has just joined us.

ASSEMBLYMAN McKEON: I apologize, Mr. Chair.

ASSEMBLYMAN GUSCIORA: Oh, thank you.

I just had a conversation with DEP Commissioner Brad Campbell, who spoke in favor of the measure and looks forward to favorable consideration in the future.

I think the $64,000 question is how clean is clean, what will happen under the Federal standards if we do nothing, and will we get any cleaner under the California standards? I think if we come to any conclusion that it will benefit us to adopt California, then I think we should move ahead

with it. That's just my personal view, but I hope we get that information today.

So, again, I want to thank all the participants, both pro and con, because the reason why this is for discussion, as you point out, is that we hear two different records, two different stories. I think that we have to get a convergence of the two or try to sift, as lawmakers, to decide which route we should go, whether we should do nothing, adopt the Federal Tier II standards -- which if we do nothing we will adopt -- or should we go, take that extra step, or is it an extra step to go to California, the Level II, and join the states -- New York, Massachusetts, Vermont, and Maine.

Thank you.

Okay. I'd like to call -- and we'll try to have this as fair as possible, a good mix of the pros and the cons -- and one who has been at the impetus of this, New Jersey PIRG, and I'd like to invite up Andrew Hudson.

ASSEMBLYMAN CHIVUKULA: Mr. Chairman, how do you handle the questions for the last -- questions--

ASSEMBLYMAN GUSCIORA: Yes. If anyone wants questions, I apologize. If anyone had questions for Assemblyman Ahearn, I'd be more than happy to entertain that now. I just thought the experts were here to -- that really know the ins and outs and that they, perhaps, would be better addressed by the participants.

ASSEMBLYMAN CHIVUKULA: Yes. I'm not talking about the Assemblyman, but I'm talking about sort of giving subject matter expertise and testimony.

ASSEMBLYMAN GUSCIORA: Yes, I would hope you would answer questions. I know you have some considerable concerns.

ASSEMBLYMAN CHIVUKULA: I just want to understand it. I just want to--

ASSEMBLYMAN GUSCIORA: Well taken. Just to remind me that if anyone has questions, please let me know, or feel free to jump in.

ASSEMBLYMAN CHIVUKULA: Thank you, Mr. Chairman.

ASSEMBLYMAN GUSCIORA: It's important that we are identified for the record, though, since the transcript and this is being broadcast over the Internet.

Yes, Assemblyman Ahearn.

ASSEMBLYMAN AHEARN: Yes, Mr. Chairman. Before you go forward, I did want to say, if there are questions, if you like, I can come back, particularly on any of the Federal preemption issues, some of the litigation potential, that type of thing. I'd be more than happy to discuss that.

ASSEMBLYMAN GUSCIORA: Great, thanks.

ASSEMBLYMAN AHEARN: I'm not a technical expert as to what's NO_2 and NO-what, and what comes out that's specifically causing health problems. But in terms of the legislation itself and the implications on the State, I'd be more than happy to answer questions.

ASSEMBLYMAN GUSCIORA: Great. Thank you.

If you could please identify yourself for the record?

A N D R E W H U D S O N: Thank you, Mr. Chair.

My name is Andrew Hudson, H-U-D-S-O-N, and I'm the Clean Air Advocate at New Jersey Public Interest Research Group. We're a statewide

environmental and consumer watchdog organization with about 20,000 members. We've been around for about 30 years, working to defend the environment, public health, protect consumers, and safeguard democracy.

I'm here today to testify on behalf of both of the bills, which would implement the LEV II standards, the California clean-car standards. And while we have a number of people here to testify, I will try and keep my remarks relatively brief, because we have brought you a wide variety of coalition members to speak on these issues. I really want to focus my testimony on a couple of points, which I think are very key to why this legislation is so important for New Jersey and also so very doable in just the next few months.

First of all, I'd like to answer the Chairman's question that, in fact, the California standard does have direct and concrete benefits above and beyond both our current and LEV standards and the Tier II program, which we would adopt in 2004. I'd also like to make the point that cars are ready, that the vehicles that are needed to meet the requirements under the California emission standard are on the road right now. There is demand for them. The question really is whether or not we can do these cars or not -- they can be built -- but whether or not New Jersey will have enough numbers of them on the road to address our clean air problem.

I would also like to note that the infrastructure for some of the alternative fuel cars is definitely available, and where it is not available, can be built at a nominal or nonexistent cost for the state. And also that unlike the Federal program where we are working as one, obviously, of a number of states under a clean air program that cannot be tailored to our individual needs, by

adopting the California standard, we'd be joining a much smaller set of states. And given the California Air Resources Board's general good reputation for working with partner states on the low-emission vehicle program, we believe we would actually have more influence over the process, and the kind of regulations we're dealing with, under the California legislation than we would under Federal.

The real points of why I'm here and why I think this legislation is so important, though, comes back to the intent of the legislation, which is to reduce air pollution. There can be very little doubt from any member of the Committee, or anyone here in the room, that New Jersey suffers under a undue burden of air pollution. Common sense simply tells us our air is too polluted, when we walk outside on a average summer day and find that the air just isn't right when you breathe it.

The statistical data is certainly there to back up this assertion. New Jersey PIRG put out a report towards the end of this summer which found that 2002 was the smoggiest summer in recent memory. Air pollution has been steadily worsening, especially smog pollution, for the last several years. And 2002 was more than three times as polluted with smog as 2000, and more than twice as polluted as 2001. So this is a problem which is not going away any time soon.

Last summer, nearly one out of three days, the federal government advised us not to let our children out of doors to play, because the air was so polluted that it would actually do harm to their lungs and damage their development to be breathing outdoors. You'll hear testimony today from members from the American Lung Association and other medical professionals

that the problems with smog, air pollution, not only trigger air asthma attacks, but may, in fact, be contributing to the actual epidemic of childhood asthma in our state.

Today New Jersey has over 100,000 children with asthma. These are the most at-risk people in our state from air pollution, especially smog air pollution, and it is now believed that the high levels of smog may actually be creating the causes of asthma, in addition to triggering the asthma attacks that are the symptom.

As I mentioned, the Federal program is simply insufficient. Both the current program that we're under and the potential Tier II program we would adopt in 2004 is -- simply don't do enough to address this problem. We've worked under the Federal standard for a number of years. And while we appreciate the attempts of the Federal government to create a program that addresses the needs of most Americans, New Jersey is not the average state for air pollution. We are well above average in terms of a number of air pollutants, and the Federal standard simply doesn't address this adequately.

At present, the Tier II program is insufficient in addressing smog for a couple of particular reasons. The first reason is that the benchmark pollutant, which the Tier II program monitors, is nitrogen oxides, which are our major contributor to smog pollution but not the only chemical involved. As a contrast, the LEV II program, the California Emission Standard, uses nonmethane organic compounds as the benchmark pollutant. What that means is that, in addition to picking up nitrogen oxides, which cause smog, will also capture a number of other chemicals, monitor them more closely, and

require stricter reductions of those chemicals, thus bringing down our overall smog pollution more.

The second main difference is that the California program goes much farther than the Federal program in addressing evaporative emissions. Evaporative emissions are essentially those caused by fumes leaking from the gas tank or the radiator, not directly connected with the tailpipe emissions from the car, but which still contribute greatly to smog. About half of the hydrocarbon emissions emitted by cars and trucks come in the form of evaporative emissions, not tailpipe emissions and, therefore, it's essential that any program that addresses air pollution address these very seriously. The LEV II program is much better at reducing these than the Tier II program.

And lastly, the biggest difference, perhaps, is that under the Tier II program and the California program, cars are sorted into bins or categories, essentially, of their emissions cleanliness. I passed around a list of the cars that are sorted into a few of the California bins so that members can get an idea of what we're talking about. Essentially, the Tier II program preserves two bins for pollution that allow up to twice the pollution of both nitrogen oxides and particulate matter that are allowed in any category in the California program. Because of that, if we adopt the Federal program, while some cleaner cars will be allowed to enter the roads, we'll still be preserving a place for the dirtiest cars on the road as well. And therefore, our average won't be as low for reducing smog pollution.

Our research shows -- it's based on EPA data and using their own formulas for modeling air pollution -- that in just the first 20 years of the program, the California emission standards will deliver reductions in smog

forming pollutants close to 20 percent above what the Federal program can offer New Jersey. Given the public health effects of all the smog pollution, it's imperative that if we have a chance to reduce by a fifth the total amount of smog pollution in the air, we should jump at a chance to do that.

Unfortunately, smog is not the only pollutant that New Jerseyans need to worry about breathing. As Assemblyman Ahearn mentioned, we have an enormous problem in this state with cancer rates, and our air pollution is a major contributor. The average resident in New Jersey breathes levels of air toxics that are 1600 times higher than the Federal health standard. I know that's a hard number to get your head around. To try to put this in context, if you can imagine a world where there is no polluted drinking water, where no New Jerseyan smokes, where there are, in fact, no other sources except for automobile exhaust -- which could possibly give anyone cancer -- 13,000 New Jerseyans would still develop cancer and possibly die over the course of their lives.

Eighty percent of the chemicals, which are cancer causing air toxics emitted in our state, are emitted by cars and on-road engines of various kinds. Again, the Tier II program addresses these to some extent, but it is simply not as effective as the California program. Again, because Tier II uses a benchmark pollutant of nitrogen oxides, it fails to address a number of other chemicals which may be harming New Jerseyans' health.

Some of the chemicals that come out of the tailpipes of our cars, which contribute to cancer and other ailments, include chemicals like benzene, which is a known carcinogen and causes central nervous system depression; 1,3 butadiene which is probably a human carcinogen and is known to cause

respiratory irritation; as well as formaldehyde, another probable human carcinogen with numerous respiratory effects. There are literally dozens of other chemicals in the Federal register emitted by our cars and trucks in large numbers.

According to EPA numbers, these chemicals, as an example, are emitted primarily by on-road engines, namely our cars and trucks. Fifty-seven percent of our benzene emissions, 77 percent of our 1,3 butadiene emissions, and 39 percent of our formaldehyde emissions come from both sources. Again, this totals to over 80 percent of the air toxics that New Jerseyans breathe being emitted by on-road sources, mostly our cars and trucks.

While Tier II will deliver some modest reductions in these, it simply is not aiming at the right target because of the benchmark pollutant. In order to dramatically reduce these pollutants as we must do, if we are to meet a commitment to public health, we need stronger legislation; namely, the California standard.

There's probably very little doubt in most peoples mind that the air is polluted. I think that one of the major sources of debate on this bill has been how the program works. I know there have been a lot of different conversations that I'm sure all the members of the Committee have had. I'd like to try and lay out, as briefly as possible, how the LEV II, Low Emission Vehicle program, the California emission program, actually works, and to stall some of the most common misconceptions.

The first and most important thing to understand is that over 90 percent of the cars sold under the California emissions program are exactly the same cars that we drive today. Again, if you look at the list from the California

Air Resources Board Website I passed around, you can see there are vehicles in the California standard like the Ford F-150, the Chevy Silverado, and numbers of large vehicles. This is not a bill that will cut off consumer choice. In fact, it will expand it greatly by offering consumers, in addition to these larger vehicles, a wide range of low emission and zero emission vehicles, as well.

The largest source of misconceptions about the California program comes from the zero emission vehicle program, which is divided into several parts. Under the California program, approximately 10 percent of the cars manufactured for sale -- so not necessarily actually sold every year, but built by the auto manufacturers and intended to be sold in New Jersey -- would fall into the zero emission vehicle program. That doesn't mean that 10 percent of the cars will be electric vehicles or even zero emission cars. The program has been restructured several times to provide an enormous amount of flexibility for auto manufacturers.

To break down the basic categories -- under the 10 percent requirement, 6 percent of that 10 percent, the majority of it, may be met by regular gas-burning cars that are modified slightly to reduce their evaporative emissions, which I discussed earlier, and to provide an extended warranty on their emission system. Cars like this are already on the road right now and are being driven by New Jersey consumers. They include things like the Nissan Sentra and the Honda Accord and the next model year also.

These cars are gas burning. You fill them up at the pump like anything else. They get better gas mileage in some cases but that's not the problem that we're monitoring on them. They're simply cleaner, gas burning

cars, and 6 percent of the zero emission vehicle requirement can be met by these vehicles.

The second category is really more a collection of options for the auto manufacturers. Up to 2 percent of the zero emission vehicle requirement can be met by the manufacturers creating for sale cars that use a variety of emission saving technologies. There are a host of options available under the set of the program, including cars that run on alternative fuels, like compressed natural gas; cars that incorporate an electric engine with a gas powered engine, as the popular Toyota and Honda hybrids do; as well as cars that run certain distances on pure battery power and other options.

Essentially, this program -- the design is to allow manufacturers to create a variety of prototypes and test models, to explore options, make a limited number of them available to research centers or corporations with a vested interest in the technology being used in the car, and use those vehicles towards credit to meeting the zero emission vehicle requirement. The multipliers, the different kinds of engines and fuels can be combined in different ways to provide more credit to the auto manufacturers, as well, towards the zero emission vehicle requirement.

The last 2 percent of the zero emission vehicle requirement is the only part that is actually a true zero emission vehicle mandate. The 2 percent do have to be zero emission cars, which until recently we presumed would mean only electric vehicles. There's some recent advances in technology that may make that no longer an entirely accurate statement. To leave aside some of the fuel cell and the exciting new technologies that are coming out for a moment, electric vehicles right now are manufactured by every major

manufacturer. They are for sale in California in a number of different models.

At the back of the packet about the vehicles I passed out to you, there are pictures of several of these electric vehicles. One of the common misconceptions we hear is that electric vehicles are essentially modified golf carts. Let me assure you that that is not necessarily the case, that there are some of those cars that have been offered. The vehicles for sale in California include pickup trucks, they include SUVs, like the Toyota Rav 4 and station wagons, like the Nissan Altra. All of these cars are available under the zero emission vehicle requirement.

The State department of purchasing has bought a few electric cars for us to test here in New Jersey. So far, the responses have been very popular with those who have driven them, which fits with poll data that New Jersey Public Interest Research Group has found, as well, from California. In particular, in one of our reports, "Ready to Roll", we reference a poll conducted by the California Mobile Source Air Pollution Reduction Committee of 294 electric vehicle owners. This was conducted in this past March.

The survey found that 80 percent of customers who drove an electric vehicle found that they were more satisfied with their electric car than they were with their current gas powered vehicle. Seventy percent said that they used the electric vehicle as their primary car, even though 93 percent of them did have access to a gas powered vehicle, as well. Seventy-four percent of electric vehicle owners said that they used their electric car more than three-quarters of the time, and only 46 percent said that they expected to use their EV that much before they took ownership. Seventy-seven percent of

those who currently leased an EV in California said that they would lease another one in the future, if it were made available to them.

All this to say that, contrary to what members may have heard in some places, there is demand for electric vehicles. People enjoy them. Responses to those who have driven them are almost uniformly very, very positive. The cars perform in most aspects exactly like a regular car -- traveling 80 to 100 miles on a charge and being able to haul as many passengers and bags and groceries as an ordinary vehicle, as well.

As I said, I put aside for a moment discussion of fuel cell vehicles, which has been very rapid in the last few years and may soon make electric vehicles relatively a moot point. Every manufacturer at present has a fuel cell car in development, most of them through the California Fuel Cell Partnership, which is a collaboration between oil industry, auto companies, and state and Federal government in California. In particular, Ford and Honda, two of the major six auto manufacturers, both have limited numbers of fuel cell vehicles available for lease and fleet starting in 2003. Originally, the fuel cell partnership in California intended to put about 60 fuel cell vehicles out for tests on the road by 2003 in California. It's actually expected there will be closer to 1000 vehicles on the road in 2003, to give you an idea of just how quick this kind of technology is advancing.

Of course, no discussion of alternative fuel vehicles would be complete without addressing infrastructure concerns. Already, I should say, there are nearly half-a-million vehicles that run on alternative fuels, which are currently on American roads and being refueled frequently.

New York, Massachusetts, California, Vermont, and Maine all have alternative fuel vehicle programs on the road and are working to develop infrastructure as well, so they provide certain road maps for New Jersey. The vast majority of vehicles, again under the California standard, will be ordinary gas powered vehicles. This does not apply to over 90 percent of the cars. But where New Jersey does lack infrastructure or needs to construct it, we believe that the cost to the State will be minimal, if at all, and that the technology is certainly available to make those refueling options possible.

There are two primary types of fueling stations right now that New Jersey would likely need to construct in order to provide fuel for alternative fuel vehicles under the California program. I'm not going to talk about private home recharging stations, because private recharging units are included in the sticker price of many electric vehicles and can be installed in the home for less than the cost of a new washer and dryer set in most cases.

Public recharging stations run, for construction, between $5000 and $10,000 per station. But to offset that cost, there's already Federal grant programs available which can provide moneys in excess of $100,000 to any business which constructs a public recharging station for electric vehicles.

In California, the majority of electric vehicles are leased in fleets by major corporations, who take it upon themselves to install the recharging stations in their parking lots. It's presumed that New Jersey would follow that program, and therefore, the State need not provide any money to construct electric vehicle charging stations unless they so choose.

The next kind of refueling station for alternative fuels will be natural gas, which admittedly are more expensive to construct than electric

recharging stations. The State already has a few of these in work. We have been buying natural gas cars for the last few years, as a way to reduce our emissions overall. And we're not expecting that we would procure a large number of them under the program, so these would be -- not the major source of expense. Again, there's no mandate, under the California emission standard, which requires the State to construct new fueling stations for the cars. The onus is on the manufacturer to produce the vehicles, not on the State to make sure that they are fueled.

The last potential fueling station we may have would be hydrogen fuel cell stations. There's limited information available on these, because only a few prototypes have been built and only at research centers in California. I can tell you that the major oil companies, which include BP, Shell, Exxon, Mobil, and many others, are all actively pursuing the creation of hydrogen refueling stations -- that prototypes can pump fuel safely into the car in roughly the same time it takes to refill a conventional vehicle.

The last point I'd like to address is New Jersey's right to implement the program and some of the legal issues surrounding the case history of the LEV II program. Again, in terms of laying the preliminary groundwork, I should say that no challenge has ever been successfully brought, no lawsuit has ever been successfully brought that challenged California's right to have an alternative vehicle program, and no one has ever challenged an independent state's right to adopt the California program since the 1990 Clean Air Act amendments.

Under those amendments in 1990, the Federal government specifically left the option for states around the country to adopt either the

California plan or the Federal program. Immediately following that in the next two years, four other states -- all of them in the northeast -- moved to adopt that. The Ozone Transport Commission, which at that point represented New Jersey as well, petitioned at that point to have all of the states from Virginia to Maine adopt the California low emission program because our air pollution is so much more severe in the mid-Atlantic region.

That petition was denied because the Federal government felt that it would produce -- place an undue restriction on the auto industry to sell more clean cars. But the tradeoff was, the deal that was struck, was that all states who had not already begun implementation of the California standard were given express permission to do so starting in 2006, which is what the legislation we're considering today would do. So there is no conflict between Federal law and New Jersey over our right to implement the California standard starting in 2006.

There's also been some questions about two particular lawsuits, one in California and one in New York, which affect this low emission vehicle program. The first -- the lawsuit in California -- essentially addresses one particular multiplier or option for auto manufacturers under the zero emission vehicle program. As I mentioned, there are a number of ways that manufacturers can combine different technologies, including alternative fuels or more efficient engines, to gain credit under those zero emission vehicle programs. One of those multipliers, in particular, the auto industry contends, amounts to setting a fuel efficiency standard. That, unlike a tailpipe emission standard, is not something California can set on its own. Fuel efficiency standards can only be set at the Federal level.

At present, there is an injunction preventing the LEV II program from moving forward, which expires in two years. We've spoken to representatives from the California Resource Board, who were unfortunately unable to join us today, given the short notice and the long flight, but who assure us that the way they're moving forward is they're simply going to remove the multiplier if they're unable to find a way to settle their differences with the auto industry, and offer them the added flexibility of better engine types without actually setting the standard based on fuel economy.

There's no part about the lawsuit in California which challenges the zero emission vehicle program as a whole or challenges California's right to mandate. Zero emission vehicles are at a different set of emission standards than the Federal's.

The second lawsuit is in New York state. New York began implementing the low emission vehicle program, but pursued, with the auto industry, an extended time line for implementation of the zero emission vehicle program. The reason for that was that the rules were still in flex and being debated at the time. They felt that they wanted to offer the auto industry a better lead time to adapt the cars to meet the zero emission vehicle mandate. After negotiating the standards with the auto industry, the auto industry turned around and sued New York state, arguing that the extended time line notice, the alternative compliance plan, amounted to a third program for emission standards in the U.S., which you'll remember is not allowed under the 1990 Clean Air Act amendments. New York and the representatives we've spoken to there feel confident that they will win the lawsuit. There is no

injunction preventing them from going forward and they are proceeding with implementation of the California standard on their altered time line.

First of all, New York feels that they will win the lawsuit, because all they've changed is the time line for implementation and not the standards or the monitoring requirements. Should they lose their lawsuit, however, they would simply revert to the regular low emission vehicle standard in California. So again, this is not a lawsuit that challenges their right to use the California standard, just one that challenges the particular time line that they're using.

In conclusion, I hope that my testimony and the testimony of others here will assure the members of five basic points. One, that New Jersey's air pollution is real and severe and needs to be addressed immediately, because of its threats to human health. Two, that cars and trucks are the major contributor of this pollution and that only a pollution program that addresses vehicle emissions will satisfy our public health needs. Third, that the LEV II reductions, the California emission program reductions in clean air, are real and substantial and well and above what can be provided, either by the national low emission vehicle standard or by the Tier II program. Fourth, that there is no legal reason that we cannot adopt this program in 2006. And last, that the cars and the technology required for the California emission program are ready, are on the roads right now, and that the only thing holding this bill up is debate in committee and not technology.

I thank the Committee for the chance to testify, and I'm happy to answer any questions.

ASSEMBLYMAN GUSCIORA: Thank you, Andrew.

Do any of the Committee members have any questions?

Vice-Chair Linda Stender.

ASSEMBLYWOMAN STENDER: Thank you, Mr. Chairman.

One of the issues with the LEV II versus the Tier II, as you've spoken about at great length, is what the emission levels would be and, for instance, that the automobile manufacturers are making a case that the LEV II is not going to accomplish substantially different outcomes than the Tier II, and that it's far better because of this requirement for the 10 percent that would require electric vehicles that can't be sold.

MR. HUDSON: Right.

ASSEMBLYWOMAN STENDER: One of the things that we've been shown, and I think you've seen these charts that show that all of this stuff comes out about the same. We have, in fact, a letter from the EPA saying that they're right. Can you comment on that, based on-- I mean, this whole thing about the nitrous oxides being the basis of the Tier II--

MR. HUDSON: Sure.

ASSEMBLYWOMAN STENDER: --versus what you're saying, seems to me to be substantial. So I don't--

MR. HUDSON: Right.

ASSEMBLYWOMAN STENDER: I'm confused.

MR. HUDSON: That's certainly understandable. When you say that the difference between these things is in what you're counting in terms of reductions. So the last substantial reductions you're seeing in the documents, I presume from the auto industry, are from opposition folks -- are generally looking only at nitrogen oxide emissions, which is one very key benchmark pollutant.

We feel that we've used modeling based on EPA numbers. If you include the wide range of pollutants that are captured under the California standard instead of looking at one individual pollutant, the overall benefits are much greater, and that's where we derive the larger numbers 20 percent reductions in smog pollutants as a whole, so not just nitrogen oxides, but other sources, and also 23 percent reductions in air toxics are all captured because the California program not only reduces nitrogen oxide emissions at the tailpipe, but also captures a wider range of pollutants and reduces them in more ways essentially.

ASSEMBLYWOMAN STENDER: So what that would also mean, I guess, is that -- in terms of just the nitrogen-- Am I saying that right?

MR. HUDSON: Nitrogen oxides.

ASSEMBLYWOMAN STENDER: Nitrogen oxides. That, in fact, Tier II and LEV II are similar. Is that a fair statement?

MR. HUDSON: They are similar in terms of--

ASSEMBLYWOMAN STENDER: In that one piece?

MR. HUDSON: --that one piece. Primarily, because Tier II was modeled on the LEV II program. It's built around it, but it doesn't include a couple of additional requirements, and it doesn't track all of the relevant pollutants.

ASSEMBLYWOMAN STENDER: Okay. Thank you.

And then the other question I had is when you talked about the 10 percent, the make up. You said that 6 percent of that 10 percent do not, in fact, have to be electric vehicles, that the existing cars out there are modified and would meet that standard?

MR. HUDSON: Yes. To just revisit that, under the zero emission vehicle mandate, it covers 10 percent of the vehicles manufactured for sale -- fall into the zero emission vehicle program. Actually, it would be more accurate to say 8 percent of that 10 percent do not need to be zero emission vehicle cars. Six percent of the 10 percent falls into a category which is called partial zero emission vehicle credits, which are essentially more efficient gas burning cars, like the Nissan Sentra or the Honda Accord, which are modified. They offer an extended warranty on their emissions system, and there are some minor engineering done to reduce the evaporative emissions, above and beyond what Tier II requires.

ASSEMBLYWOMAN STENDER: So that means that you're saying that if we were to go to this LEV II, that, in fact, the amount of electrical cars that would need to be sold to meet this standard would be what?

MR. HUDSON: Less than 2 percent the number manufactured for sale, because these numbers don't represent exact numbers of cars on the road. It's the number of vehicles manufactured for sale. There's some good data I would point you to, as well, in our "Ready to Roll" report, that breaks down the number of zero emission cars that will need to be sold each year in the program.

The other thing I should add, as a caveat, too, is that the number of zero emission vehicles that need to be manufactured for sale in the state increases a little bit each year over time. So that we're putting more and more of the cars on the road each year. And over time, the first year I believe it's around 1500 zero emission vehicles. I'm quoting from memory here, so I would check the report to make sure that my figures are accurate. But it's a

very small number of zero emission vehicles that is actually being manufactured.

ASSEMBLYWOMAN STENDER: You're saying 1500 in the first year would have to be manufactured--

MR. HUDSON: Manufactured for sale in the state.

ASSEMBLYWOMAN STENDER: And how many are manufactured overall in the state? Do you know?

MR. HUDSON: I don't know. I'll get an answer on that. I know that there are over 6.4 million vehicles registered in the state right now. I don't know how many of those are new cars.

ASSEMBLYWOMAN STENDER: We do like our cars.

MR. HUDSON: We do have a lot of them.

ASSEMBLYWOMAN STENDER: Okay. Thank you.

ASSEMBLYMAN GUSCIORA: Assemblywoman Myers.

ASSEMBLYWOMAN MYERS: Thank you.

You said that the biggest problem that you see with regard to air pollution is cars and trucks.

MR. HUDSON: Yes.

ASSEMBLYWOMAN MYERS: And I just got all this material today, but I was looking for what recommendation are you making with regard to trucks?

MR. HUDSON: Well, when I reference cars and trucks, I'm referring to cars and light-duty trucks, like SUVs and pickup trucks, which are actually covered under our emission standards the same as passenger vehicles**.** So this legislation you're considering today does not directly address emissions

from things like larger interstate commerce trucks, Mack trucks basically. So when I reference trucks, I'm talking about SUVs and pickup trucks, passenger vehicles.

ASSEMBLYWOMAN MYERS: Okay, but I was looking through this -- "How Air Toxins Affect Public Health".

MR. HUDSON: Yes.

ASSEMBLYWOMAN MYERS: It says that the number one pollutant is diesel particulate matter. The cancer risk is 1300 times what most of the other pollutants are. Now it seems to me -- I don't know a lot about cars and trucks -- but diesel, don't-- Almost all the big trucks run on diesel?

MR. HUDSON: So that there--

ASSEMBLYWOMAN MYERS: So wouldn't most of that come from the big trucks?

MR. HUDSON: Not entirely. It's difficult to provide accurate data on exactly how much of our cancer risk is caused by diesel trucks or buses or things like that, and how much is caused by--

ASSEMBLYWOMAN MYERS: No, that's not the question. The question is diesel particulate matter, which is in your report, does that come from normal cars like I drive?

MR. HUDSON: Generally not, no, unless you drive a diesel powered car.

ASSEMBLYWOMAN MYERS: Oh. Well, then, it comes from trucks?

MR. HUDSON: Yes.

ASSEMBLYWOMAN MYERS: Okay. But you have no recommendation with regard to the large trucks, which I'm sorry, but I'm one. I have to travel on these highways in this state, and I hate these big trucks that spew all this black stuff out all the time. I just wonder why we're talking about putting a burden, not only on New Jersey businesses, but also on the people of this state, when it seems like the number one problem is from trucks. Why would that be? Why are we looking at air pollution as this big problem and then focusing in on cars when--

Besides the trucks, I've also been told that most of our pollution comes from the midwest and Pennsylvania. I know we have power plants -- my district is along the Delaware River -- that emit pollutants that I'm told are coming into our district, and that's a problem. I know the Sierra Club has been involved in that up there. It seems to me like the focus is on something that we've already fixed. We just went through, like, six or seven years of tremendous aggravation trying to get the inspections and emission system established in New Jersey. It seems to me that it's finally calming down, and now you're talking about doing that all over again it seems.

I agree with my colleague, Assemblywoman Stender. I'm really interested in the amount of improvement we would see from a bill like this versus other things we might do.

Thank you.

MR. HUDSON: The Assemblywoman is correct. There are a number of sources of air pollution out there, including in-state and out-of-state industry, as well as diesel trucks. Our assessment is that the single largest source of New Jersey's air pollution, both in terms of smog forming pollutants

and air toxics is from passenger vehicles, light-duty trucks, and cars, and that that is the primarily place as well, that the state has an option to address air pollution.

I know that this Committee passed a few weeks ago, and it was passed through the Assembly Chambers just recently, a letter essentially admonishing the EPA for their stance on new source review. Unfortunately, that's almost the extent of what we in the state can do to reduce pollution from Pennsylvania's power plants. What we do have a tremendous amount of control over is how much pollution the cars that are offered for sale in New Jersey are going to put into the air. By passing the California program, we'll take the biggest bite out of the biggest source of the worst kinds of air pollution, essentially, is why we would advocate this as a solution. And while those other sources are out there, and New Jersey PIRG does support, in a variety of ways, other solutions to those problems, we believe this is the most important step that New Jersey has an option to take this year.

ASSEMBLYMAN GUSCIORA: Yes. We have Assemblyman McKeon and then you.

Assemblyman McKeon.

ASSEMBLYMAN McKEON: Okay. I'll be brief. I thought I understood your testimony to indicate that the California standard was superior based upon evaporative fuels, as opposed to the current one. Can you expand upon that. And for myself, I'm not intimately familiar with percentages that are evaporative fuel created pollution. Could you help me with that?

MR. HUDSON: Sure. Essentially the point I was making is that one of the differences between the Tier II program and the California program is that California is much more stringent on evaporative emissions. So both programs -- evaporative emissions are essentially caused by leaking radiators, gas tanks. They're essentially what generally would be referred to as minor engineering flukes. There are small fixes to the car to make sure that the gas tank doesn't -- that materials that make up the gas tank cap don't expand and contract, and therefore, allow fumes to be released; that radiators, as they're cooling in the sun after a long drive, don't release fumes. There are a number of different ways that a car, as something which is essentially burning a fossil fuel, as it cools down will evaporate out or reduce without combusting the fuel will still emit those chemicals in the air, which can be very hazardous for human health.

The California standard takes a much closer look at those and requires much great reduction, and because of that, delivers a much better public health benefit.

ASSEMBLYMAN McKEON: I mean, I guess that's the end story. Because following up on my colleague, Assemblywoman Stender, as well as Assemblywoman Myers, is that a quantifiable difference between the two? Is there a way, relative to the California standard, or rather, how much in New Jersey from a perspective of air quality would be related to evaporative emissions?

MR. HUDSON: In terms of finding a percentage for how much less pollution would be emitted is based solely on the evaporative emissions standard, I'm not sure. I don't know a good number off the top of my head.

I'll try and get back to you with that. It seems obvious that if we're taking greater steps to reduce a level of pollution which isn't present, the LEV II standard just goes farther reducing those emissions. I don't have a good quantitative number of which chemicals are reduced by which percent. The program is undisputedly more stringent on evaporative standards.

ASSEMBLYMAN McKEON: That follows the logic, but it would be good to know that there is that much of a difference from a quantitative perspective, because that would certainly help or -- all of us as far as any struggles we might be having.

MR. HUDSON: Sure. I'll try and find that number for you.

ASSEMBLYMAN GUSCIORA: Assemblyman Chatzidakis.

ASSEMBLYMAN CHATZIDAKIS: Yes. Thank you, Mr. Chairman.

You said there was approximately over 6 million motor vehicles in New Jersey. Is that just automobiles and light trucks or all?

MR. HUDSON: That's registered vehicles in the state. I believe it is only passenger cars, but I wouldn't swear to that number.

ASSEMBLYMAN CHATZIDAKIS: And you also stated there's actually zero emission vehicles, since a lot of LEV vehicles are already being sold and produced in the State of New Jersey. It's only, you say, 1500, maybe 2000, with a backdrop of over 6 million cars already on the roads. I know this was discussed during our emissions debate about why the older cars, that quite clearly-- The newer cars the last few years are obviously a lot more efficient in recovering the gas that have EGR valves, O_2 sensors, crank sensors, evaporative canisters. Any thoughts being given to try to make some of the older cars a

little bit more emission efficient, so to speak? Because we can build the most efficient car as far as the emissions, but as long as we have older cars and other equipment out in the environment still polluting the atmosphere-- I can go down with my Honda -- Toyota Prius or the Insight and here comes an oil burner right behind me, and you have to wear a gas mask in a neighborhood.

So we're looking obviously at one part of it. We have to start somewhere. I do agree. We know the prevailing winds, but it's time to take a stand in New Jersey and worry about our own cities. I'm from Burlington County. We do have many ozone alerts. We blame Philadelphia, but we can't do anything about that, so we want to take action here.

I'm just wondering should we also focus on -- the average age of a vehicle on a highway is an eight- or nine-year-old car, I believe. Let's face the emission standards then weren't as they are in the last couple of years. Should we also look at helping people-- Because let's face it, people drive those older cars, drive them not because they want to, maybe the case is they can't afford it. That was the issue we discussed when we said if a car failed emissions within 18 months, the people if they spent more than $500 they would have to junk the car. Of course, we don't want to force anybody out of their transportation.

Should we also maybe have as much time and energy and focus looking at some technology in ways of helping people make their older cars more emissions efficient, while at the same time looking at our hybrid electric cars and things like that? I'm just curious what your view would be on that? Because clearly, 1500, 2000 cars a year in the face of -- I don't know how many cars are sold in a year in New Jersey -- that's a very small fraction.

MR. HUDSON: Sure.

ASSEMBLYMAN CHATZIDAKIS: We want to look at this on both ends, and obviously the cause of the pollution is there. New cars will just actually be a very minimal impact on that. We want to look at the back end, so to speak, and should we also look at that way of a way of improving our quality of our air and obviously our health quality in the State of New Jersey.

MR. HUDSON: That's an excellent point and very well taken. We know that older vehicles are our major contributor to auto pollution. The California standard is an emissions program, so it does address tailpipe emissions from all cars as well. The primary focus that we're talking about with the newer cars is set up, because for the reasons you mentioned, if we're wary of penalizing people who own older cars, many of whom are lower income or can't afford a new car necessarily, and feel that the easiest way, based on both consumer demand and manufacturer readiness, is to adopt this standard since the cars are ready and people will buy the cleaner cars if they're out there. We know that not everyone will use this car, and that's why I make that point about the relatively low numbers of zero emission vehicles and near zero emission vehicles being sold in the early part of the program.

The goal of the California emission standard is not to have everyone drive a hydrogen fuel cell car or even a hybrid car, because that's simply not realistic in terms of our economy. But it does look at the major place where we can make the greatest reductions, which is the new cars sold being as clean as available. We think that's, like you said, the most logical first step and really a very powerful one as well. While the initial numbers of cars are small, their benefit to the environment is very large. And over time,

because those numbers increase, we can really see New Jersey moving forward and becoming a leader in clean car technology with all the emissions reductions and the public health benefits that that implies.

ASSEMBLYMAN CHATZIDAKIS: So those older cars are sold and resold. The cars have a long life anymore, you know. Again, they go down the scale -- two, three, four, five owners. I've been doing business my whole life. I started in the '60s, when you started a car in the showroom, you couldn't breathe in the showroom. You had to walk outside. Today, if a car started, obviously, we've seen the technology and obviously the improvement in our quality of life, as far as the emissions related to our health. But being in the business as long as I have, I do see the impact of these older cars in the environment.

Obviously, maintaining cars is another aspect of this that, if you drive around with a check-engine light, obviously your car is malfunctioning and that's contributing to emissions that the car technically should not be emitting, but-- There is some responsibility in this, too. It goes both ways. I guess the point I'm getting at is we can mandate and produce as many-- We can maybe say 10,000 zero emission cars. Forget about the LEVs. There's 10,000 cars, 100 percent electric. I'm just curious to know, how much of an impact that would have, long term, considering the background and the backdrop of our whole State of New Jersey and what it is. I'm just concerned that people think if we do this, this will solve our problems in the State of New Jersey with emissions and health concerns, which we all have. Maybe they will, maybe they won't. I don't know. Perhaps we ought to look at this as a two-headed monster and proceed on both those sides.

MR. HUDSON: Sure. I mean, the Assemblyman was right. There is fortunately no magic bullet for emissions, and there are a number of sources that we're concerned about. Again, the reason why we believe this bill is such a good option for New Jersey is that we are a state which owns an enormous number of cars. We're one of the most heavily driven states in the country. We drive more vehicle miles per person here than almost anywhere else on the planet. Because of that, one of the most logical steps for us to do is to make sure that we're getting the newest and best technology on the road. There is a certain amount of responsibility, perhaps, for auto emissions with the owners of older cars. But given the options available to them, we think the better option is to give more choices to consumers for new cars. And again, that's the best starting place and the most logical step for New Jersey to take, rather than revisiting again a ways to try and bring used car owners back to the lot and revamp their cars. It's much more difficult to do that than to just require more of the cleanest cars that are already available to be put on the roads in New Jersey where it makes the biggest difference.

We think the benefits really are there for it. Again, above and beyond the emissions reductions promised by any other program, we're looking at 19 percent reductions in our smog forming pollutants and 23 percent reductions in our cancer causing air toxics. So the benefits are definitely there for the California program. It's just a question of whether or not we want to take that step.

ASSEMBLYMAN CHATZIDAKIS: Thank you.

ASSEMBLYMAN GUSCIORA: Assemblyman Chivukula.

ASSEMBLYMAN CHIVUKULA: Yes, Mr. Chairman. Thank you, Mr. Chairman.

Take me through this program very quickly. Basically there are two standards. One is the EPA Level II and the California Tier II. The Tier II program arrived by a board called the California Air Resources Board, which has no membership outside of California members. There are four northeastern states -- have adopted the California Tier II program. California made some changes a few years ago. So these four states are having litigation because they have to go for the alternate compliance. Is that correct?

MR. HUDSON: Not all of the four states -- Vermont did not adopt the alternative compliance plan, I believe, and they are not involved in the lawsuit. So New York, Massachusetts are involved in the alternative compliance plan and the related litigation.

ASSEMBLYMAN CHIVUKULA: So it's New York and Massachusetts. What are the state -- the other one, the fourth?

MR. HUDSON: Vermont.

ASSEMBLYMAN CHIVUKULA: Vermont, so they're not in. Okay. So basically what you're saying if that if New Jersey would adopt this we're marrying into something we don't have any control. If tomorrow, California decided to change, we don't have any control. Is that correct?

MR. HUDSON: Essentially, yes. We are looking at--

ASSEMBLYMAN CHIVUKULA: Directly, we don't have any membership on the California Air Resources Board?

MR. HUDSON: Nor do we have a membership at the Federal EPA, other than our elected representatives in D.C.

ASSEMBLYMAN CHIVUKULA: We have a -- we sent our former Governor there. (laughter)

ASSEMBLYMAN GUSCIORA: Reason alone to adopt the California standards.

ASSEMBLYMAN CHIVUKULA: No pun intended. I have tremendous respect for the former Governor.

The other thing I want to know is once you have that, that means if New Jersey was to adopt it, there are some changes. We have some difficulties. Then we have to go into court for the alternative compliance. Is that correct?

MR. HUDSON: This would be speculation on all of our parts, because we don't know exactly what will happen.

ASSEMBLYMAN CHIVUKULA: Right. The whole thing is speculation. Like the fuel cell technology is speculation.

MR. HUDSON: Sure.

ASSEMBLYMAN CHIVUKULA: I read a newspaper two months ago that said that earliest prototype you can have on the roads is 10 years and beyond. But you're saying you could have a fuel cell ready until next year, 2003. So it's speculation-- Go ahead, answer the question.

MR. HUDSON: So the first point is whether or not we are losing control, essentially, of our own emission standards by choosing the California plan over the Federal plan. In a certain sense, you're correct in that the California plan is set by California the same way the Federal plan is set by the EPA. I would argue actually that we have more input in the California plan for two reasons. One, there are fewer states involved in the California plan than

there are in the Federal plan. So just in terms of a bargaining pool, a number of voices at the table, there are many fewer people involved, and most of them are northeastern states like us who have similar concerns. Second--

ASSEMBLYMAN CHIVUKULA: You stay right there. Go to the United Nations and tell me how many minority countries have power there. Go ahead.

MR. HUDSON: Sure. Notwithstanding the undoubtedly great weight of New Jersey in the eyes of all the other states in the county, the second point is that the California Air Resources Board and, California in general, have a good track record, and we were sadly unable to bring very many representatives from the New York state government down, given the short notice of the hearing date, but many of them found that they had tremendous input into the process. That the Air Resources Board was willing to work with them and discuss their considerations. It's also worth noting that even the alternative compliance plan, which there is some dispute over, was negotiated between the states involved in the northeast, as well as California, and the auto manufacturers all sat down at a table and crafted that alternative time line. So there was no secret back room negotiations. No one was trying to make an end run. All of the states and the businesses are trying to craft the best available plan.

The litigation that's followed seems to flow out of an industry attempt to sue almost any chance there is available on the LEV II program. But in terms of us abdicating responsibility, I think that we would have more input under the California process. And if we should decide, which is not what we're considering now, but if we should decide in the future to adopt an

alternative compliance plan, it seems like at this early juncture if we're going to speculate that probably New York and the related states will win their lawsuit, and therefore, the precedent will actually support our ability to implement an alternative time line, if that's our choice down the road.

ASSEMBLYMAN CHIVUKULA: I have difficulty in speculating, because we are dealing with the costs to the average consumer, the person who's making $15,000. Can he or she afford a car which is $20,000? I have driven a hybrid vehicle, which is not by any means a zero emission vehicle, so we cannot afford that. But that's beside the point. You have testified that the LEV II emissions do not include the hydrocarbons. But I have a chart here that I had received from the Alliance of Auto Manufacturers which have verified from the EPA that these numbers, these graphs, indeed, are correct. And basically, it says -- the title, the caption -- "New Jersey VOC, volatile organic compounds," and assume the hydrogen, carbon, they're all organic? This hydrocarbon is an organic compound, and it's volatile. And NOx, which is a nitrogen oxide emission (indiscernible). So I know they used -- what's called a Mobile 6 model. You probably used a similar model to calculate the numbers. Do you have a similar chart that we can compare, so that my colleagues who are asking me, "Do we have a chart like that from N.J. PIRG?" I said, well, let's ask them.

MR. HUDSON: I don't have a chart like that on me. The comparable data I could refer you to would be in two reports that we put out. One "Clean Cars, Cleaner Air," which I've made copies available for all the members if they didn't have them already, which looks at air toxics in

particular. I don't know if we have a graph that I can exactly say is essentially the same.

ASSEMBLYMAN CHIVUKULA: No. I mean, if you have it there, I can plot it -- the graph for you. It's not a big deal. If you have it there, I can plot it for you.

MR. HUDSON: Sure.

ASSEMBLYMAN CHIVUKULA: Basically, we want to make sure that we're all -- we all believe in environment. I know the United States, with 300 million people in the world, with the world population at 6 billion, we contribute about 25 percent of the world's pollution. Look, I'm with you. I mean, we are concerned about the air quality, and New Jersey is always on the receiving end, whether we get the emissions from the Pennsylvania power plants or the acid rain from the midwestern states. I agree to all those things. But I just wanted to make sure that you have some data so that we can--

You know, we're making a major decision here. So it's not like you are for the environment and you are not for the environment. I don't think that is the question here. Are we making a responsible decision for the average person who lives in New Jersey very long term? If you look at whether it's a zero emission rate goes -- let's say, based on the current technology, is electric cars. The average electric car, the battery charge, the current technology is four hours. That means we have to have gas stations from gas stations. You have to have charging stations. That means every four hours you have to stop to charge your batteries so that you can drive further. Sometimes I sit in traffic for an hour some place. Now I'll be worried --

already my blood pressure is high (laughter) and my charge is going. So there are issues. We have to make sure that the infrastructure is there.

The other thing is that in California they say that we don't sell any wine until it is time. So is it the right time for us to adopt California standards? That's the question. So I want an honest answer. I ask this question every day to myself.

Then, let me go into -- I have a few other questions. In terms of the-- I know the population of New Jersey is 8.4 million. There are over 6.4 million cars on the roads. We don't even know how many trucks go through. We don't even know how many dump trucks go through. We have a whole bunch of stuff. We don't even talk about that. Agricultural vehicles. There's a lot of pollution out there. Any vehicle that uses diesel -- I don't think that comes under this particular program -- is that correct?

MR. HUDSON: Not unless it were--

ASSEMBLYMAN CHIVUKULA: Except for the passenger cars.

MR. HUDSON: Right.

ASSEMBLYMAN CHIVUKULA: Unless you are driving a Mercedes-Benz diesel, you are not coming under this program?

MR. HUDSON: Yes.

ASSEMBLYMAN CHIVUKULA: Okay. That's all right. I just want to make sure. Then, in terms of the traffic, I know-- I think my colleague, Assemblyman Ahearn, mentioned about I-78, New Jersey Turnpike, Parkway, but what percentage of the cars that are traveling through New Jersey highways are from New Jersey? We are a pass through state for all the great northeastern states. So we need to understand that also the pollution even--

I believe in regional cooperation. Pennsylvania puts very good controls on their power plants, and they're willing to go through the new site review program. But in terms of-- If we have a program-- New Jersey has a program. You cannot regulate the cars that are coming from Delaware or Pennsylvania or Maryland. You cannot do anything with those cars. Is that correct?

MR. HUDSON: No. We don't have the power to legislate what they do with their cars.

ASSEMBLYMAN CHIVUKULA: So we need to know what percent of those-- Because, you know, when you talk the lung cancer that is caused by -- we have cancer clusters in the State of New Jersey. We admitted that. We also have 116 Superfund sites. All right. We have lots -- we are notorious for creating the hazardous waste and creating a health hazard, that's a separate issue. But we need to understand what percent of the cars and what percent of the pollution is caused by New Jersey cars and how this particular law really makes the air quality better in New Jersey. It's a good question to get answers to.

MR. HUDSON: Sure. There were a number of questions there. I will try to address them as directly and as briefly as I can. In terms of the emissions, you're right. There are reductions in hydrocarbons brought by the Tier II standard. I didn't mean to imply that that was not present at all. The point I'm trying to make is that because the number of pollutants that are tracked as the benchmark under the California program is broader than the number of ones that are tracked under the Federal program, we simply get better reductions in more chemicals.

So the data you're holding up -- I don't mean to imply that it is blatantly untrue. I'm saying that when we look at the range of pollutants that affect public health in New Jersey, the California program delivers more reductions on more of those pollutants than the Federal program does.

In terms of whether or not this is the right time to implement the law, I'd say this is the best time. And in terms of giving the auto manufacturers, in fact, the best lead time available and playing on an even playing field as best we can, the sooner the Legislature votes to adopt the California emission standard, the more time they have to prepare to get the cars ready to expand production, if that's what they need to do. If we get three, four years down the road into 2006 or 2007 and then decide to implement this program, it would be a much quicker turnaround time. And, in fact, the auto industry would probably have more trouble complying than if we passed now.

In terms of the percentage of cars on New Jersey's roads that are from out of state, I don't have a good number to give you off hand. I will try to research that for you, but again, I think the point that we feel is most important is that New Jersey is at a crossroads. We have some options that are available to us and some things that we cannot control. We know that we're in some ways just in the wrong place at the wrong time for pollution. We are on the jet stream. We do get pollution from Pennsylvania. We are a major corridor for traffic from out of state.

But rather than look at the problems and throw up our hands and wish for other solutions, we believe the best option is to adopt the California program, which is the best available solution for automobile emissions. We

can't control all the pollution controls in other states, but we can do everything possible here in our state to reduce emissions. And we would also say that the benefits of that are not marginal. Again we're looking at nearly a 20 percent reduction, and in smog forming pollutants, this is taking into account other sources as well, but this is above and beyond the Federal standard -- 20 percent reductions in smog forming pollutants and 23 percent reductions in air toxics.

The benefits for that in terms of fewer sick days, fewer asthma attacks for children, fewer cancer rates in New Jersey are really just immeasurable. If we could prevent even one of those, we would perhaps say it's worth passing the bill for. We're looking at saving literally thousands of asthma attacks and hundreds of premature deaths just by passing this bill, independent of other factors that we could take on.

In terms of the cancer rates in New Jersey, obviously there are a number of factors. The data that we're presenting is the cancer risk only from mobile sources. So this is independent of sites -- with the Superfund sites or other hazardous chemicals or other independent factors. Ruling out all other possible causes of cancer, given our current air pollution rates, air toxics will still give 13,000 people in New Jersey cancer over the next 70 years. That, to me, is reason enough that we should move quickly to adopt this legislation.

ASSEMBLYMAN CHIVUKULA: Let me ask a couple of other questions. One is the California program -- when they started this program, for them to ramp up this program, how long did they take?

MR. HUDSON: The original California program? California has designed its own emissions rules more or less from the start, starting in the

1970s. The first incarnation of the low emission vehicle program started in 1990 and has been amended a few times since then.

ASSEMBLYMAN CHIVUKULA: In terms of the incentive that they have provided, in terms of the incentives for the consumers and the automobile manufacturers to manufacture this low emission vehicles, and all that, I mean, do you have any figure on how much money they spent on that incentive? Because I know the State of New Jersey is in a deficit--

MR. HUDSON: Sure.

ASSEMBLYMAN CHIVUKULA: --$2 billion in the beginning of the year and $6 billion in the middle of the year. And so, do we have money to pay the incentive? That's another question, that's for the thing, too, and--

MR. HUDSON: There are two things at issue there. One is that California has opted to put money into zero emission vehicle buying programs, to provide tax incentives essentially for people who buy electric vehicles. There is no requirement under the California standard that we do the same. The California standard only sets requirements for the number of vehicles manufactured for sale. It doesn't require that we make it easier for people to buy them or that we provide the infrastructure to refuel them.

If New Jersey chooses to do that, New Jersey PIRG would probably say that that is a good idea, and we would be willing to have that conversation down the road. But the legislation that's currently being debated and considered today has no incentives. There's no up-front cost for the state to forward money or provide tax incentives to people. If we choose to do that down the road, that's a separate conversation.

ASSEMBLYMAN CHIVUKULA: As my final question -- I got the cue from the Chairman that I'm taking too much time -- in terms of enforcement, how many people staff, administrative staff, to enforce this program in California and what would be the need in New Jersey?

MR. HUDSON: I don't know a good number on that. Obviously, we're creating a new program that addresses air pollution. I know there are a number of staff in California. I don't know an exact number of staff in California who work on it, nor would it necessarily be comparable, given just the size of our state in New Jersey. I will try and find a better answer to that question and get back to you.

ASSEMBLYMAN CHIVUKULA: Thank you very much for your patience.

ASSEMBLYMAN GUSCIORA: Thank you.

I am going to try to move this somewhat along, unless Mrs. Myers is going to buy us all dinner. But since this is for discussion only, I feel comfortable about moving this on. If anyone has any other further questions, I know Andrew will be available, and I'm sure he will follow up as well.

With that, I'd like to assure members of the opposition that I'm going to be flexible enough so that you'll have enough time, because this is important that we both hear airing of both sides. Having said that, I have to take one person out of time, because she's going to leave at 3:30. I'm only going to be able to take one.

Sharon Jones, if you could testify.

And I just want to state that a Kimberly Smith and Virginia Bell are also in favor of the legislation. Are they here? Do you want to

acknowledge? (no response) Because we have quite a few people to testify, and I don't want this to be too cumulative.

Ms. Jones.

Yes, welcome.

S H A R O N J O N E S: Hi. Thank you, and thank you very much for hearing me everyone. It's an honor being here today. We've heard from the experts, and there are just a lot of questions whirling around in my mind, and you guys have heard a lot. But you know what, I'd like to paint you a different picture. I live in Lakewood, New Jersey, which is right next door to Toms River, and we have issues with cancer clusters. I have an eight-and-a-half year old son. When we talked about all the problems, as far as the air quality and everything, I'd like to let you know what my son's life is like.

He was born -- and he has asthma. He has reactive airways disease. When he goes to school, he has to make sure that there's medication there and there are nebulizers. I see so many nebulizers in our school's health department, and that's because there's such a lot of kids who have breathing problems. There are really high rates of asthma here in New Jersey all around the state. But for my son, for the first seven years of his life, I would say every two and a half months at 3:30 in the morning I'm rushing to the emergency room because he can't breathe. In the summer, his life is horrible. He can't go outside. New Jersey has more ozone alert days than I can even think about. So for him, he's stuck inside all the time. Once he gets sick, we're constantly nebulizing. Every three hours, he's on a respirator. He can't play outside. It's no life for an eight year old. He's on all kinds of medicines, and he's not the only one.

This is what we hear a lot in New Jersey. You guys are going to sit here and make some decisions about what happens and what we can do in New Jersey. New Jersey has always been a leader on environmental issues, and I know that our legislators here, or you wouldn't be on the Environment Committee, are just as concerned about that.

I also talk to people out in communities, knocking at doors, being involved with parent groups, asthma groups, etc. It's a common topic that they're concerned about what's going on with New Jersey's air quality, what can we do to protect our kids more. We're already afraid of the water, afraid of the air. We need help. We really do.

As we go door to door, we're constantly hearing people talk about the same thing. I heard you guys talk about how much time you spend in traffic. We hear that all the time. These are things that we're fighting. These are things, as parents, we're concerned about. We may not be able to do anything about the diesel trucks, but I think if there's one thing that we can do, if it's cutting down the amount of pollution that's coming from the cars, then it's our jobs to make sure, at every step, we take as much pollutants out of the environment as possible. We can't make Pennsylvania do this or that, but I guess it's just like recycling and anything else. Once you start, it gets easier for people to do.

As we join California and Massachusetts, maybe we'll see Pennsylvania -- we'll see other states begin to do it. But I just think that we're obligated. As a parent, I'm obligated to make sure that my son is as healthy as possible. I think, as our esteemed legislators here in New Jersey, sitting on the Environment Committee, I would like to see you guys take every step

possible to cut down the amount of pollutants and smog that's in the environment. This is what we owe our kids. This is our future. I beg you to, in my opinion, vote the right way. Let us become number one with California and the other states by adopting a really strong standard that's going to protect us and our children.

Again, thanks for giving me an opportunity to speak today.

ASSEMBLYMAN GUSCIORA: Thank you, Ms. Jones.

MS. JONES: Oh, and that's J-O-N-E-S. I was supposed to spell it, right?

ASSEMBLYMAN GUSCIORA: Great. Thank you.

MS. JONES: Thank you.

ASSEMBLYMAN GUSCIORA: Any questions? (no response)

MS. JONES: Thank you. Oh, his name is Jamie.

ASSEMBLYMAN GUSCIORA: Thank you very much.

I'd like to call Robert Babik from General Motors.

R O B E R T B A B I K: Mr. Chairman, members of the Committee, good afternoon. My name is Bob Babik. I work with General Motors, and I'm the Director of Vehicle Emissions. I had written testimony, and I think you all have a copy of it. I'm going to try to go through quickly and just highlight some things in the sake of time. There's some things I'd like to maybe address more importantly that might help answer some of the questions a few of you raised earlier.

The California Federal Tier II debate has been a long-time debate. I need to tell you a little story. The story goes that the Federal program came out. It was called Tier I, and it came out quite some time ago. And when the

feds did that program, they were preempted that they couldn't for another 10 years do another program. Once they did their program, a while after California came out with this LEV program. And admittedly, that program was more stringent. Okay.

We tried to work with EPA over some time to say, "We need to address that gap." We did it with the national low emission vehicle program. We voluntarily stepped up to that program because we understood there was a gap, and we tried to address the issue of that gap. In the meantime, California came out with its LEV II program, again, being more stringent, the next wave of regulation. When California did this, though, we knew the importance of having a Federal program that had equivalent air quality benefits, because if we didn't, we'd face a patchwork of regulatory programs again in the states. So what we did was work closely with not only EPA, but with the states, including New Jersey and others. You did have input into that process. We crafted a rule that does provide equivalent air quality benefit.

As stated earlier, those modeling runs do include NOx and hydrocarbons. The EPA has reviewed them. And later on in my testimony, I'm going to highlight some issues I think there are with the information that the New Jersey PIRG is using. I apologize for my low energy level. I'm not feeling that great today.

The only real difference between the two programs these days is this issue of the ZEV mandate and what they refer to as technology forcing, that California's technology forcing. I tend to argue that the ZEV mandate is actually technology chasing. The reason being is because the ZEV mandate

came out a long time ago, and it required 10 percent of all the vehicles had to be zero emission vehicles. And at that time, that meant electric vehicles.

Over the time -- and keep in mind that GM kind of was the culprit in that, in that we brought out a vehicle which is the predecessor to the EVI, and that's kind of what got CARB the idea that, "Boy, look at this neat electric vehicle that GM built, and maybe we should mandate these." Subsequent to that, as time went on, we have made our engines extremely clean. We have made our evaporative systems extremely clean. We have created hybrid technology, and we have created alternative fueled vehicles. And as mentioned earlier, we are now pursuing fuel cell vehicles.

Each time we came out with these technologies and began to implement them, CARB used it as an opportunity to modify the mandate a bit, to allow these vehicles to get partial credits. What happens is, though, over time these partial credits, and because of how clean gasoline engines have gotten -- and one of the handouts you'll get from me, and again, I won't go through it in detail, but it's a one-pager called "Why the ZEV Mandate is a Bad Idea." In there, you'll see originally CARB thought that the ZEV mandate would give it a tremendous amount of benefits each day in tons per emissions.

When they did their last ZEV review, I think they were down to two tons per day -- I'm sorry, two tons over the lifetime of the regulation. So the emissions have extremely whittled down only because of all these new advances made in clean engine technology. And that clean engine technology was recently -- a report by the University of California, Riverside, where they actually said, in some instances, the air going into the intake is dirtier than the air coming out of the tailpipe.

Keep in mind that there's other programs out there. I think California did a gas can program that actually got them 26 tons of pollution per day for hydrocarbons. And the ZEV mandate, through their own volition, they are saying costs $1.8 million per ton. It's numbers like that -- we're not saying we're against clean air. We're saying we need to use our resources wisely. We, at GM, want to use those resources to pursue advanced technology. We don't look at electric vehicles, and we understand now we're down to 2 percent. But when the gentleman kept saying all we have to do is offer them for sale, keep in mind that the only way New Jersey is going to see a benefit is if your consumers utilize and purchase those vehicles.

So forcing us to offer them for sale doesn't get you anything. I'm going to talk a little bit later about how we're pursuing to actually get advanced technology vehicles in the consumer's hands. But electric vehicles, we don't think are the vehicles of the future. We are working on fuel cells, hybrids, displacement on demand (tap recorder malfunction, gap in tape) continuously the transmissions. I'm no longer going to be transcribed. But instead of looking at this ZEV mandate as something that diverts our resources, we do want to focus on these things.

With that said, again, I'm not going to dwell on my written testimony. It's before you. I do want to more focus on some of the issues that I think are important and that should be raised today. First of all, the New Jersey PIRG report, which I've heard referenced to a few times, seems to imply that air quality in New Jersey is getting worse.

When I saw that report last week, I immediately went on to the New Jersey DEP Website and looked at its status of how emissions -- and I say

emissions are doing in your state. And it looked like to me, across the board, emissions are trending downward. They're trending downward because of a lot of the emission programs put forward, both on the stationary and mobile source side, and that the air, as far as emissions being emitted into the air in New Jersey are going down significantly, especially, when you look at the light-duty side with cars and trucks, that's-- We've made great strides in reducing emissions. And if you look at our modeling results, if you look at it being projected from 2000 to 2020, they're on that downward trend. That's even, though, vehicle miles traveled -- that's how far people drive -- is going up over that time period, and the amount of cars on the road are going up during that period, but we're still maintaining that downward trend.

Vehicle rules are not one-day rules. Okay. (begins slide presentation) Brian, if you could put up the one on turnover. They take time. When you do a vehicle rule, the fleet turns over very slowly. If you look at this chart, this is just an example. I used the 1994 date, because that's when the Tier I vehicles were available. If you looked at 1999 -- the green bar is total vehicles on the road -- it's over, I think, 200 million. And if you look at the little gray bar, of those 200 million, that's how many 1994 or newer vehicles there were in 1999.

As you can see, it takes time for these newer vehicles to get on the road. The manufacturers have made great strides in Tier II, as Brian will show you with some charts that show how emissions have gone down over time. I mean, they're 99 percent cleaner. They're almost at the near zero level themselves. These are internal combustion engines. And what we propose is that as time marches on, and as the modeling shows, New Jersey will continue

to see the benefit of those advanced, clean vehicles on the road. You have to give the programs time. They don't happen in a day. You're going to see benefits over time, as those clean vehicles come on the road.

The New Jersey PIRG report says that while New Jersey's air is getting worse, because in 2002 we showed these increased smog levels, I think a tripling was referenced. What the report doesn't highlight, and it was kind of interesting, because I took a guess this weekend that I might know why it tripled. You have to understand that with smog it's an equation that not only includes emissions, both NOx and hydrocarbons, but, as you know, your ozone days only happen in the summer. The reason they only happen in the summer is because ozone is created when you have high temperatures, high sunlight, and those compounds available.

Your best summer was 2000, coincidentally, because it was your coolest summer in recent history. Two-thousand-two -- and I got the climate numbers from a New Jersey Website also -- you all have great information in the state. The 2002 summer was one of the hottest in recent history. Therefore, the way I look at it is, though, while emissions are being reduced, the tripling I think was most likely due to the hot weather that caused that blip. I don't believe that represents the true trend that emissions reductions are happening and emissions are being reduced in your state.

I also wanted to address the modeling issue. Again, and because it's the only person I've heard spoke thus today, that I don't know what other people are going to raise on modeling issues, but the New Jersey PIRG references that they've done modeling, and they came up with percentage differences. I want you to be aware that the modeling that they used was that

of Massachusetts, that they, Massachusetts, did a couple of years ago when they were addressing this issue. We submitted to them, through Air Resources, Inc., which is a consulting firm.

Air Resources, Inc., the primary person there is Tom Darlington (phonetic spelling). Tom Darlington works both with CARB and EPA on developing the mobile source models -- reviewed what the consultant did in Massachusetts. We submitted eight pages of comments on why that modeling was not correct. I've circulated that to you all, or it will be circulated to you today. I just want to highlight that we did the modeling using the modeling that you see on the chart that the Assemblyman was kind enough to hold up. We did it using New Jersey data, not Massachusetts data.

As you saw in the letter from Administrator Whitman, that they agreed with those results and that, as I believe she put it, there might be marginal differences. I'd like to address marginal differences in the sense that you have to understand in order for the ZEV mandate to get its full impact, it has to be executed flawlessly. Meaning all those assumptions about not just us putting vehicles for sale, but meaning that people purchase them, drive them to their fullest extent, that the infrastructure is available, all those things have to come into align to get that total benefit. So, I think, when she was addressing marginal, she was referencing that. And also, you're not taking into consideration power plant emissions for the electricity that you're using to charge the vehicles, because that isn't in the mobile model.

Let me quickly address flawless execution. Again, I just want to highlight that you can't just offer these vehicles for sale. We don't want to see a parking lot of zero emission vehicles sitting there and that they not be, what

I'd like to call, transparent to the consumer. An advanced technology vehicle for a consumer should be one in which they don't see much of a difference than the driving ability of that vehicle. But instead, it should provide some benefits such as hybrids do. Hybrids are a transparent technology. Continuously variable transmissions are a transparent technology. And we're hoping some day in the future fuel cells will be a transparent technology, and we're working on it very hard.

And by the way, when you do have testimony on those other bills, I do work at GM and with the California fuel cell partnership, and I'll be happy to provide some input then.

Let's talk about the flawless execution, though. You have states like New York, Massachusetts, Vermont, and Maine, who have adopted this program. You have Vermont that has a program in place but it's not yet implementable, because they have issues between their Legislature and their regulatory body and they have not implemented that program to its fullest yet.

You have Maine, who once had the ZEV mandate and then dropped it, because they said it didn't seem to make sense for their state. You have New York and Massachusetts who again try to work with-- I think it was an approach where people got together and talked about an alternative compliance plan. Just because that plan didn't work out, I wouldn't look at it as a negative. It's just the fact that they're trying to do things to help save their program because they can't implement it exactly the way California put it forward. If you can't do it exactly the way California put it forward, then you're telling me there's something wrong with the program itself.

It's interesting because there was a recent LA *Times* article -- I think it was on my birthday, which was September 15 -- that said California is looking at revamping their rules next year. And Chairman Alan Lloyd was even quoted in that article saying, "Battery electric technology hasn't got us to where we need to be, and it probably won't, and we need to move forward." They're going to be re-looking at everything next year.

Here's something that -- I've only been with General Motors for a year and a half. Prior to this, I worked for trade associations for the auto industry. But one thing I noticed is a true commitment to what I refer to as advanced technology vehicles. We want to get advanced technology vehicles into the hands of consumers. We want to do it in a way that makes them -- again, that is transparent to them -- that they get these vehicles and they don't see any difference in how that vehicle operates. Because otherwise, believe me, it doesn't meet their expectations. If you tell them that here's an electric vehicle that you have to charge for four hours, it only goes 90 miles in hot weather-- If you're in a cold weather climate, it's going to go a lot less because the batteries are going to drain. There probably are applications for short-term use.

I know California has been working with these neighborhood electric vehicles, that there might be a niche there. But it's not addressing the issue of pushing technology forward. We look at that as, and we're working at it currently at the Federal level, by saying, look, the best way to get technology into people's hands is to give people incentives for purchasing those vehicles. We're currently working on the energy bill to say, look, for hybrid vehicles, give the consumer a $3000 tax credit -- okay, cash in hand -- so that

it offsets the cost of the hybrid. I think even in the PIRG report they mentioned that there's a delta between the cost, between a hybrid and a conventional vehicle. Make the cost transparent to them. Do this over a short term.

We're not saying give incentives forever, because that's not a sustainable business plan. But it will help consumers get over that hump of adopting new advanced technology. And those are the types of things we think are extremely important. Again, research and development for fuel cells -- extremely exciting field to be in right now. It is in the research and development phase. I will caveat that.

I'm going to show you a couple of pictures here in a minute of some of the things that we're working on. But keep in mind, just because you build one, case in point, like we did with the initial electric vehicle, doesn't mean it's going to be a commercially viable vehicle that will get over all the hurdles. We have hopes, and we continue to pursue those hopes of having a fuel cell vehicle, a hydrogen infrastructure, and that that vehicle -- you put in hydrogen, nothing but water comes out. It's a compelling vision, and that's what we're chasing.

Having New Jersey spend its time putting in all these other infrastructures, which as I heard someone say, your resources are scarce. I'd rather be talking about how are we going to address the future in dealing with hydrogen infrastructure because people say that that issue is so insurmountable. I think we do need to be addressing it now.

Diesel particulates was an interesting comment brought up by Assemblywoman Myers. She mentioned that that's one of the areas that

everyone should be focusing on, and we are. The 2007 heavy duty rule is specifically put in place to address that. It's the same issue. You've got to have time to let the technologies get out in the marketplace. But I want to tell you, a lot of times GM has looked at it all, well, why aren't you in the hybrid market on the light duty side? What I explain to people is, we've taken a different tact. We are currently pursuing a hybrid bus. It's made by our Allison Hybrid Division.

The hybrid bus that we are creating is being put into service this year, next year, and in full production starting in 2004. That transit bus-- We look at heavy-duty transit buses as an area where hybrid technology makes a lot of sense. You have a bus that's stopping constantly. It's making short trips. It's on a current, what do you want to call it, a pattern that it goes over. We feel that's the perfect definition of what you would use a hybrid for -- the stop and go, using the battery when you need it, using the fuel, trying to reduce emissions, increasing efficiency for fuel. Those are all good things. GM is also going to be pursuing our parallel hybrid truck next year, which you will see, which is again we're focusing on the larger part of the market, rather than taking an extremely fuel efficient vehicle and making it more fuel efficient.

We thought that we want to get into the mainstream vehicles, like a large pickup truck that has utility. We're hoping that by putting a hybrid in it we can use other selling points, such as the fact that it can actually run power tools for a construction person. We want to give these people more reasons than just saying this is great technology, you should embrace it. We want to say not only is this great technology and it's very fuel efficient, but, look, it even has other attributes you want to embrace, such as you can run your power

tools for this on a construction site or a generator. That's the type of thing when I talk about transparency.

In conclusion, I'll just say that-- And again, I left you a lot of different materials on the California program versus the Federal program, the pros and cons, the issues. And again, next year GM, for instance, is planning on certifying its vehicles -- 50-state certification for it's light-duty vehicles, which means they're 50-state vehicles. You can sell them anywhere in the country -- California, New Jersey, and there is no difference in the vehicle. So to think that California is getting a different vehicle than New Jersey, it's not. There's going to be 50-state vehicles, our light-duty fleet.

We see no emissions benefits for New Jersey with going to the California program. It is an increased burden to the state, manufacturers, and citizens. When I say increased burden, there are cost issues, but let's put those aside. I'm talking about simple things, even as manufacturers have to balance the fleets and make sure what goes where, how do you do reporting, how do you develop the infrastructure, and where does the money come from. And then most importantly for the state, that means staff for you. It means holding hearings. Every time CARB changes its rules, because your rules have to be identical to CARB's -- and believe me, they meet monthly, and they like to change their rules quite frequently -- it diverts our resources from giving our full focus to developing advanced technology, such as possibly fuel cells or hybrids, because we have to still spend time and effort on coming up with battery-electric vehicles, whether they be full function ones, like our EV1 or neighborhood electric vehicles to be in compliance.

And again, if the gentleman was right, and the only requirement is that we offer them for sale, I don't see how that's bringing New Jersey a cleaner benefit, unless your citizens are utilizing those vehicles and utilizing them to displace vehicles they would otherwise travel in a regular vehicle. Okay.

And then finally, and I want to just emphasize -- if Brian can just throw up -- a lot of people-- I'll give you an example. It's funny. They always say California is pushing technology and forcing it. That van you see up there on the top is a 1966 GM Electro van. It has a lithium hydride fuel cell. This isn't new technology. Actually, a fuel cell was used on the lunar module, or whatever you call it, the Rover. There's been a lot of issues, as far as implementation of that technology.

As you can see, starting in '97, '98, we started breaking through a few of those and putting demonstration vehicles out on the road in Germany. We have facilities in Germany, in New York, in California, and a large investment in fuel cells. GM truly believes in it.

Last year we made an announcement called the Autonomy, which was a concept vehicle that basically takes the hydrogen fuel cell and the technology, puts it all in a skateboard chassis, puts electric motors at the wheels, and then you can put on top whatever kind of body that you want. It's kind of like a docking station. It was kind of interesting. All the news articles after we announced this at the auto show last year said, "Oh, look at GM, they're just doing a head fake. They're trying to get everyone to look over here at the Autonomy and that it's just a model, and they're not going to do it."

Well, we made a promise when we rolled that out that we were actually going to do this and have one working by the end of the year.

This is a picture of -- it was just released at the Paris Auto Show. That's called the Hy-wire; Hy being for hydrogen; wire meaning it's drive by wire. The vehicle can only go -- I think its range is only about 40 miles. It is drive-by-wire technology, so we limit it to 40 miles per hour because people aren't used to turning this to accelerate and turning this to decelerate -- it's almost like a joy stick -- that they might wreck it. So we've tried to make it go kind of slow.

This is the interior. What you see there is that there are no pedals. There are no engines. There is no trunk. It's a flat skateboard. We've accomplished what we set out. The hydrogen storage, the fuel cells are all contained in the chassis, as well as the electric motors. The steering wheel can slide right across the front to the other side, so it can either be right-hand or left-hand drive, and you can just do that at your whim. If you want to look strange in the U.S., you can push it over to the right and drive anyway. I don't think there's a rule against that. (end slide presentation)

It's really neat technology. But again, it's interesting, because just like we've done the last time, we always are trying to be stretching the goals and advance technology. Each time we do that, people start holding that up and say, "Well, see, look, they can do it. You should build one of these, because then make them available to everybody." What they don't address is that these are prototype vehicles. It took us multimillions of dollars to build one, not a fleet. Those are the issues now we're trying to overcome.

We have a facility in Honeoye, New York, that has been there for a long time, and we just added on to it. The whole purpose of the building we added on, which was 18,000 square feet, is to try to figure out how do you produce one of these economically, so that we can get the cost down to a conventional vehicle. At that point, people will begin to embrace the technology. But that's what we've got to get to.

With that, and again, I apologize for my energy level and maybe my focus not quite being there today. I am always willing to answer questions on any of the materials that we've passed out today. I know it was quite voluminous, and I think the lady who was helping me said she might pass it out after the hearing. They are all one-pagers, okay, just highlighting things for you. But what we did is, we broke it down into issues on the LEV program, issues on the ZEV mandate, implementation issues to the state-- We tried to break it down into pieces so you could focus on what interests you.

And with that I'll stop and allow questions. Thank you for your attention.

ASSEMBLYMAN GUSCIORA: Thank you, Robert.

I just had a couple. Now, I understand there are differences in the ZEV vehicles between California and Tier II. What about non-ZEV vehicles? Are there any differences in the mandates for emissions between higher emission vehicles? Is there a difference between the cars that are sold in California or under the Federal standard?

MR. BABIK: One of the issues I heard earlier was about the evaporative emissions, and that there's a category called PZEV, which is under the ZEV mandate part of it, which I think extends the warranty requirements

of the evaporative system to give you more credit, but it's the same system. You're just extending the warranty saying it will last, instead of 120,000 miles, to 150,000 miles.

Other issues out there, like I said-- Next year, and again, I can't speak for the other manufacturers, but we're 50-state certifying all of our light duty cars and trucks under 6000 pounds, gross vehicle weight. Those above -- there are differences in the two rules. California has medium duty vehicle requirements. Tier II has the bin structure. When we worked with EPA on Tier II, we did ask for flexibility. I mean, I was part of that when we did ask for flexibility. We did ask for more bins. But we did say that, when you end up mixing the fleet together, the emissions benefit of the fleet should be equivalent to California. So we took a different tack with the federal approach.

Again, the perception we're moving from is that, in the past, there probably were differences. I wasn't in the auto industry back in the early '90s, but as we progress forward, those differences are all but gone away. There may be a few. I don't know particularly what we do to each and every one of our vehicles. But I know as far, as marching forward, both under Tier II and LEV II, cars and trucks have to meet the same standards. I mean, it's not like we're putting on different catalytic convertors on one vehicle than another. The standards are so tight now. If you really think about it, they're down to 0.05, 0.07 grams per mile. I mean, it's almost zero. You have to ask yourself, what can you do to engineer a car to start splicing those hairs. The fact of the matter is and the fact that we're starting the 50-state certify is nothing. We're to the point where the programs are equivalent, and we're trying to make sure we're building the same cars.

ASSEMBLYMAN GUSCIORA: I'm almost sorry to say, I have one of the cars that Assemblyman Chatzidakis was talking about, one of the older cars, and, in fact, my car is in the shop. A friend of mine today drove me to--

MR. BABIK: Please don't tell if it's a GM.

ASSEMBLYMAN GUSCIORA: No, it's not a GM. But a friend of mine drove me, and I was telling him about the hearing. He was driving a Saab. He noted that GM owns Saab--

MR. BABIK: Yes, we do.

ASSEMBLYMAN GUSCIORA: --as Ford owns Volvo, which I wasn't aware of. He whipped out the owners manual, and it says clearly in the Saab, "that it conforms to the California car standards." I think there's a frustration with a lot of people in the American public that the foreign automobiles, the European vehicles, or even the Japanese vehicles, all have greater emissions controls, and that we seem to be so far behind what the Europeans and the Japanese are doing. That's why people like the California, because it makes some kind of statement for you guys to get your act together.

MR. BABIK: Again--

ASSEMBLYMAN GUSCIORA: How can you address that -- why your subsidiary, Saab, is doing things to conform to emissions control, but the American companies seem to be behind the ball?

MR. BABIK: If you look through a lot of our owners' manuals, we do 50-certify many vehicles today. As I said, when you're building cars, you have model years that, like our Cavalier, for instance, have been being built for a long time. You have turnover of the technology. You don't just hit a light

switch on the wall and immediately turn everything over to clean technology. It goes in stages. We are going in stages. As I said, next year I think is a good indication that it's all come together. We are going to be 50-state certifying.

The issue about foreign manufacturers being ahead-- Again, I like to use the issue of the hybrids as one that we don't agree on where it's best applied. Hybrid technology is not necessarily an emissions technology. It's an efficiency technology. It gets you better fuel efficiency, okay. We think that's best applied to things like larger vehicles, like a pickup truck or a hybrid bus, as I mentioned. And by the way, we built a hybrid bus. There was no ZEV mandate on hybrid buses, but we felt it made sense and a logical place to put the technology. If you find that place to put that technology where it's transparent, it's cost effective, and it makes sense, we moved ahead and did it. I hope that us not focusing on maybe the same market niches as our competitors doesn't say that we're not pursuing advanced technology as aggressively as they are. I think, as one of our examples, when you look at our fuel technology, I don't think anyone comes close.

We had a tech tour recently, and I know that we invited the New Jersey DEP, but we showed them a lot of this new technology and the areas we're applying it to. We recently had this throughout the country, and we're trying to educate the public that-- We showed them our fuel cell, and we showed them our hybrids, and we showed them the buses. And as I said, these all are going to begin rolling out. We've made our press releases. We have our production plans. It's interesting when you look at these technologies because, again it's not that we're not focusing on advancing the technology.

And the example I'd like to give is if you went to the auto show last year and looked at every foreign company and what their hybrid offering was, it looked like a conventional car, okay. They put the fuel cell up front. They had a drive train. I mean, it looked identical to the car we have today. We went through a different thought, and that is forget about the past 100 years because, we're trying to get passed the past 100 years. If you're to build a car today with this type of technology, what would it look like? And this is what our engineers came up with. We were then criticized that it was not real, and now we've proven that wrong also. We've shown that it is a concept. It can work. And now our goal is, is how do we get it to be transparent to the public. To us, a lot of that means getting the cost down so that the public can afford it.

I heard that resonate here a few times. As my mother is in the market for a car recently, and she's screaming at me about the prices, because she's on a fixed income. There's always two sides to the debate.

ASSEMBLYMAN GUSCIORA: Thank you.

Any questions?

Assemblyman Chivukula.

ASSEMBLYMAN CHIVUKULA: Mr. Babik, I think this is a good thing, that New Jersey PIRG is a great organization, a lot of volunteers. They already wanted to bring you to the table to discuss this whole thing. And with the help of the Chairman, I think we're able to have an honest, open discussion about that.

You know, late '70s, early '80s, we had the energy crisis, and we wanted to cut down the dependence on Middle East oil and all that. The car

sizes started going down, and then, in the last few years, the last decade, the car sizes started going up, especially the SUVs and all that, and got these monstrous vehicles, and there's one person sitting there and driving 60, 80 miles and gas guzzling, even though you claim that a lot of fuel efficiencies have been achieved and all that.

I think we have to be responsible to the environment, and I think you need to work with the environmental groups and try to achieve a balance, I think. The important thing is in terms of the technologies, how are you making these advanced technology vehicles affordable to people, because people are living-- As you said, there are a lot of senior citizens, a lot of people who are living on fixed incomes, and their incomes are not raising. They're not even keeping up with the cost-of-living index. How can they afford it?

I can't afford a car. You go there, the minimum is $20,000, $25,000. I mean, what is the answer to this question? I mean, in a lot of the other countries, the cars were expensive, it's okay. The U.S. is heavily dependent on cars, a very poor rail system. There is nothing there. Everybody wants to depend on these super highways and highways. And what is your solution to this problem, while keeping the pollution under check, making sure that the emissions are within the limits allowed by the law, and also making this vehicle affordable?

MR. BABIK: Well, let me address that by saying, the emissions part, I think, we've done a tremendous job of keeping them in check. The fact that we're able to continue that trend downward, even though vehicle miles traveled and the amount of cars on the road keeps going up. If you saw the difference between NLEV and the Tier II program, it's not a small difference.

We made a big inroad there to chop that down. So, on the emission side, let me say, I think we've done a good job on making that technology transparent and affordable because it is in today's cars, and we're going to continue to focus on it.

What we see as the answer, and it's kind of a two step -- I'm going to use another program that was sometimes criticized called PMGB. PMGB had its goal of having a family sized sedan passenger vehicle that met 80 miles per gallon. A lot of research and development went into that vehicle. And again, we, us, and other manufacturers built prototypes. And again, those prototypes because we're using exotic materials -- we were using cameras as rearview mirrors because we wanted to cut down on the aerodynamics as much as possible, so we got rid of the mirrors, but a camera costs more than a mirror. So we looked at those things, and not everything pans out from a cost-effective standpoint.

However, we did come up with a lot of, what we call, evolutionary technologies out of that. Electric steering -- instead of using a belt to drive your power steering from the engine, which saps a lot of energy, we now use electric steering. You're going to see that on newer hybrids and other vehicles as they come out. Low resistance tires, improvements on aerodynamics, improvements on materials, all those things came out of the PMGB program, because the government helped us with some R and D and now we're starting to put that into the vehicles, including GM. You'll see rolling out, in the next year, displacement on demand, which is you have a big eight-cylinder engine-- You can always notice, we're always focusing on the big vehicles because we think you get the most benefit on making those more efficient. You put the

displacement on demand, and when you're in a mode where you need a lot of power, all eight cylinders, just like normal. If you're cruising down a highway, it cuts down to four, because you don't need as much power to move the vehicle.

You see in our Saturn VUE, which was released just this year, and hopefully you liked it. We're offering those with a continuously variable transmission that offers an 8 percent improvement on efficiency. We're getting those technologies in, and we're doing it transparent to the consumer, a little bit at a time, baby steps, if you want to call it. Sometimes we're asked to make these leaps. And again, some of our manufacturers did it in the small cars. We did it in some of the heavier vehicles and the bus. We are asking, at the Federal level, for some incentives. Not to us, okay, but to the consumers to help them defray the cost so that they can buy either a conventional vehicle or its hybrid equivalent at almost the same cost, okay. And then we hope that if we did that for four or five years and started getting more and more of those vehicles out there, people will become more attuned to it and start accepting it.

Until you get people start touching, feeling, and using the technology, the 100 years of the internal combustion engine is a hard habit to get people past. That's what they're familiar with. That's what they're comfortable with, and now we're trying to move them past that. But it's not going to be by mandating that manufacturers build a certain percentage of vehicles, put them in a parking lot and hopes that consumers will buy them. It's trying to work together, as you mentioned earlier, with environmentalists, with government.

That's why when I read the PIRG report last week, I agreed. They're a great group. They serve the public, but I would like them to highlight the advances we've made on emissions. We've made great advances, and that was nowhere in their report. Instead, they focused on smog days during the coldest and hottest summer in recent history. To me, I don't know that that's educating the public about where we've been and where we're going. I'd rather work and talk about how can we get incentives in the states and at the Federal level and get help to start pushing these technologies into the marketplace. But with that, I know we're under time constraints. I'm sorry.

ASSEMBLYMAN GUSCIORA: Thank you.

Any other questions?

Assemblyman.

ASSEMBLYMAN McKEON: Very briefly, it's going to be a very simple one. Why is the industry so against us?

MR. BABIK: Against who?

ASSEMBLYMAN McKEON: Against this proposal for us to go to the California standard, other than arguing, relative to speaking, if it would be environmentally sound and do so. What's the downside?

MR. BABIK: The downside is the fact that, as I mentioned, in the states that have adopted the program, they're not able to implement it. California itself is now moving to revamp it. Adopting a rule for the sake of adopting a rule if it has no benefits, it's-- We're saying we don't want a patchwork of states. Our ultimate goal is to have a 50-state program that is one program that we build a vehicle and deliver it anywhere in the United States, and it meets all the rules and requirements.

Every time we have to change to California, it causes a disruption. And in some cases, with the ZEV mandate that's a disruption, actually made us divert a lot of resources that we could have used better elsewhere. To us, it's not a good use of our resources, your resources, and the consumers' resources. We spent a billion dollars, over a billion, and that's with a *B*, on EV1. We learned some, but we also learned battery technology. A full functioned EV isn't it, and we're moving on, and we'd like to move on.

Again, I'm not against clean air or advanced technology. What I'm saying is, is the way to approach it we see a different path.

ASSEMBLYMAN GUSCIORA: Assemblywoman Myers.

ASSEMBLYWOMAN MYERS: Thank you, Mr. Chairman.

Explain to me, most cars are sold through dealers. The dealers buy those cars from the manufacturers.

MR. BABIK: Yes, ma'am.

ASSEMBLYWOMAN MYERS: So this program mandates that the manufacturers produce a certain percentage, but it doesn't mandate that the dealers must buy them. How does that work?

MR. BABIK: We must offer for sale, which means, yes, your dealers must take delivery of ZEV mandate vehicles. I'm sure you'll hear from them also that they will be stuck with these vehicles on their parking lots, and what if they don't sell them. How are you going to help them?

ASSEMBLYWOMAN MYERS: Well, that was my question. Who would get stuck?

MR. BABIK: Again, a lot of times -- well, I have a feeling it's going to be back to the manufacturers. But again, I hate to see us burn our resources

on building cars that-- A lot of times people said, "Well, gees, you didn't do a good enough job marketing them in California." All of our commercials we had done were by Steven Spielberg. They were very snappy. Jay Leno bought one of our EV1s, and he likes it. You would think that we would want to recoup our investment, and that after we spend all that money we'd do everything we could to sell these vehicles to help us recoup our investment.

Everyone leased them in the beginning, because everyone wanted some control in it. They were highly subsidized. And while on one side of the fence you hear there's all this demand out there, we didn't see it. It's one of those things, when you look at history -- I think if the program could have been a success, it would have been. It hasn't been. We're all moving on to newer and better technologies. Again, we think that the Federal program does what New Jersey needs, and in the future provides clean air just as good as California. When you get into this issue about--

ASSEMBLYWOMAN MYERS: But is this question being litigated? You don't know for sure?

MR. BABIK: We don't know because we never had gotten there.

ASSEMBLYWOMAN MYERS: But, in California, there haven't been dealers stuck with cars that they aren't selling?

MR. BABIK: No, because the manufacturer--

ASSEMBLYWOMAN MYERS: They have $38 million, I understand, in their budget, in incentives, to buy these cars. That should be part of the record, because I don't know that New Jersey's talking about $38 million.

MR. BABIK: Yes. They subsidized the vehicles very heavily, as well as the charging units. There was never enough of a demand for us to make that many vehicles. We couldn't get rid of the ones we had.

ASSEMBLYWOMAN MYERS: Okay.

MR. BABIK: So we never got there.

ASSEMBLYWOMAN MYERS: So you're not sure. But normally, if a car doesn't sell, who gets stuck?

MR. BABIK: Again, it's one of those things that we have--

ASSEMBLYWOMAN MYERS: I mean, not with a hybrid or a LEV or--

MR. BABIK: We, GM, have all of our EV1s. They might be in consumers hands, but we have--

ASSEMBLYWOMAN MYERS: I mean with a regular car, like if a dealer buys too many vans or something and can't sell them. Who would get stuck?

MR. BABIK: Yes. No. What they do is they incentivise them. That's when you see the monthly sales and stuff. They incentivise them to the point where they finally move out.

ASSEMBLYWOMAN MYERS: So they take a loss?

MR. BABIK: Or the manufacturer.

ASSEMBLYWOMAN MYERS: Okay. So you're not--

MR. BABIK: Yes. I was going to say you're in an area I'm not too familiar with.

ASSEMBLYWOMAN MYERS: Oh, all right. You honestly don't know?

MR. BABIK: No.

ASSEMBLYWOMAN MYERS: If you could find out, I'd like to know that.

MR. BABIK: But I'm just saying, with the ZEV mandate part, I thought you were asking what did the dealers do with ZEVs, and we never got there.

ASSEMBLYMAN CHATZIDAKIS: Mr. Chairman, if I may, I can answer that question.

ASSEMBLYMAN GUSCIORA: Yes.

ASSEMBLYMAN CHATZIDAKIS: Once a dealer buys a car, it's the dealer's car.

ASSEMBLYWOMAN MYERS: That's what I thought, but--

ASSEMBLYMAN CHATZIDAKIS: In all my years, General Motors never took a car back in 35 years that I knew of, unless it was a lemon.

ASSEMBLYWOMAN MYERS: That's what I thought.

ASSEMBLYMAN CHATZIDAKIS: No. It's the dealer's car.

MR. BABIK: Again, with the ZEV mandate, though, I think we handled it a little different, but--

ASSEMBLYMAN CHATZIDAKIS: Well, yes, the EV1 cars, they were only leased initially. Actually, General Motors retained ownership, and they set up an infrastructure with charging stations. I think it was California, New Mexico, Arizona. It was a pretty attractive car. A lot of people say these type of cars usually aren't the snappiest looking, but the EV1 was. I thought it was a moderate success. I don't know, financially obviously, it probably

wasn't. But, if I may also add, your displacement on demand -- I don't know if you know, but GM had that in 1981, called the 8-6-4.

MR. BABIK: Yes.

ASSEMBLYMAN CHATZIDAKIS: It's a good idea. It didn't work then.

MR. BABIK: We have the computer power now.

ASSEMBLYMAN CHATZIDAKIS: Hopefully, the computers are better today, because those cars were all deneutered back to an eight cylinder, in fact.

MR. BABIK: Yes. The issue with that was it was a technology before its time. I think I heard somebody say that today. We now have the computer power to make it work. We have it in our heavier vehicles. And as I said, they're beginning to roll out in the 2004 model year, and I think you'll be very pleased in their performance.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Babik.

Thank you, Assemblyman, for your expertise.

MR. BABIK: Thank you.

ASSEMBLYMAN GUSCIORA: Any other questions? (no response)

Thank you very much.

With that, is Jeff Tittel still here? Jeff Tittel from the Sierra Club.

J E F F T I T T E L: Sorry, just a lot of other things going on today.

Since there's been a lot of--

ASSEMBLYMAN GUSCIORA: Excuse me, Jeff. Can you just spell you name for the record?

MR. TITTEL: Yes, sure. Jeff Tittel, T-I-T-T-E-L, Director, New Jersey Sierra Club. Since there's been a lot of testimony today, and I don't want to try to repeat a lot, but I just wanted to really talk about, I think, looking at our future versus the past. And so many times in the past, when new technologies have come forward, there have been so many nay sayers. When there are programs that come forward such as seat belts, catalytic convertors, there have been those within the auto industry that have said no to the new technologies; that seat belts will say that our cars aren't safe; that catalytic convertors are going to raise prices and inconvenience people, and people won't like them. Every time that has happened, things like unleaded gas -- it turned out to be wrong. I think what we see today is, again, we're at another point in time in history where we can look at the past and look at our future. New Jersey has air problems, and the data I've seen showing TIR data New Jersey has actually shown a slight increase over the last couple of years, after years and years of progression where we were making progress.

But more importantly, we have an obligation to the next generation to try to clean the air and to try to make up for a lot of past mistakes. The new technologies that are there and that this bill will help advocate and push will help industries. If New Jersey passes this, along with the other states in New England, maybe instead of closing the two auto plants that are left in New Jersey, this could be the kind of product line that would come in, be it hybrid or, potentially, even fuel cell.

But more importantly, we're losing the competitive battle to foreign countries and foreign companies, which are now becoming more American companies than some of our own. Toyota, Nissan have announced

a joint venture that, in 2006, they will be producing hybrid cars in Ohio and Tennessee -- 20,000 a year. They can have the capacity to go up to 100,000. American auto manufacturers are still fighting bills like this. You don't see the Japanese auto makers here. You don't see the German auto makers here, because they're going ahead with this technology.

I think that this Committee can send a clear message that we want New Jersey and this country to move forward, that we want to help create jobs in this state. We have two major fuel cell manufacturers here. We'd like to see that go forward. We have those bills to try to help push that technology. But when you look at New Jersey's air, a third of our air pollution comes from other states. We're fighting to clean that up, what's happening in Pennsylvania. A third comes from industrial sources in this country and a third from mobile sources. That's the largest area that we have direct control over. We've gone after industry. We've done a lot to help reduce. Our air is still dirty, and we need to find ways to help reduce it and the best ways, to go after mobile sources.

One of the things that we tried with enhanced I&M was to go after older cars. It turns out that one of the reasons enhanced I&M did not work as well in New Jersey is that by the time the program went into effect in 2001, half the cars in the state were actually newer than 1996, and enhanced I&M really has no impact on them.

We have our SIP coming up next year for review, and that's the State Implementation Plan. New Jersey has not met the reductions that it's required to. If we don't come up with ways to help lower emissions in this state, we will be under sanctions. We were under sanctions back in the early

’90s. Enhanced I&M didn’t do it for us, and we have to look at other alternatives. This legislation is one way to help us meet our SIP call.

We also see things happening. Summit Bank last week announced that all their new branches are actually going to have plug-ins for electric cars, part of their green building program. We talked to New Jersey Transit about doing the same types of things, at their train stations, for people with cars. The whole hang-up, it seems to be, on the zero emission vehicles, I think, is sort of one that’s really minor and can be overcome relatively easy through fleet sales, through municipalities, and state government and utilities. When you look at the numbers, if three people in each town in New Jersey bought a zero emission car, we’d meet our requirements.

I look at it this way. If 5 percent of Sierra Club members would buy one, we’d meet our requirement. So I think it’s something that’s very doable and that we should not sell ourselves short in going forward with it. And hopefully, this bill will help push the American auto makers to move forward and compete better with the Japanese auto makers so we don’t have what happened here that happened in the late ’70s, while General Motors was pushing Buick Electras, Toyota Corollas were running them off the block, so to speak. We’re at that point again, and I think that this is a good bill. It has a lot of bipartisan support, and I’d like to see it go forward.

Thanks.

ASSEMBLYMAN GUSCIORA: Thank you.

Any questions from the members?

Assemblywoman Stender.

ASSEMBLYWOMAN STENDER: Thank you.

Now, you mentioned the S-I-Ps, the SIPS.

MR. TITTEL: The SIPs.

ASSEMBLYWOMAN STENDER: That's a Federal review--

MR. TITTEL: It's a Federal review of the New Jersey state air program.

ASSEMBLYWOMAN STENDER: Now, one of the things I know that, one of our problems, is the Federal standards with the utility plants and the smoke stack emissions, and the fact that they have not -- that the feds have not-- They've stepped back or stepped away from the standards so that we are subject to emissions that are blowing over us from other states. I don't even know the answer to this. It just seems to me that if we're going to be held to a SIP that -- when at the same time they're reducing standards, is that possible? Is that what they'll do?

MR. TITTEL: Yes.

ASSEMBLYWOMAN STENDER: Yes.

MR. TITTEL: It's very possible. Because, under SIP, you have to look at your internal air pollution. So, when you have to come up with your plan, you're going to have to look at the different sources. New Jersey electric utilities are relatively clean compared to the rest of the country. This Martin Creek's Plan -- unfortunately, Assemblywoman Myers is no longer here -- but Martin's Creek, which we've been fighting and working with the Assemblywoman on, puts out more SO_2 than all the utility plants in New Jersey combined. It's a big problem, and it's a problem with the Bush administration, but it doesn't mean that we get off the hook. It doesn't mean that the kids in New Jersey who are affected by air, both in-state and

out-of-state, get cleaner air. The only way we get cleaner air, unfortunately, right now is we have to clean up our air. Hopefully, our litigation and other things that this State is part of, going after the other states, will continue. But under the SIP, we're responsible for our air, and two-thirds, at least, of our air pollution are generated within the state.

ASSEMBLYWOMAN STENDER: This clean car bill would make a difference in that?

MR. TITTEL: Yes. It would help, especially, if you remember, SIPs come up for five years. So, if this was included as part of it, this could be part of our overall reduction plan. And unfortunately, and I'll be honest, because environmentalists sometimes look at things wackily, if we don't come up with ways to reduce mobile sources, there's not many other sources to go after. If we go after industry, it hurts our competitiveness, and they've done a lot already. The only things we have left to go after are backyard barbecues, and I think it would look really stupid if the State of New Jersey banned the average family from going out in their backyard and cooking with charcoal briquettes. So there's not a lot that we can do. This is one thing we can do, and this is one thing I think that will help us meet the next round of SIPs.

And by the way, I should mention that the last round, the reason New Jersey went forward with it, is because Sierra Club did sue the previous administration, and we hope we don't have to do that at this time. But this is one way for us to have part of our air reduction program for the feds so that we don't get penalized, because we're out of compliance, and we need to make reductions, even though we get pollution from other states.

ASSEMBLYWOMAN STENDER: Thank you.

ASSEMBLYMAN GUSCIORA: Thank you.

Thank you, Mr. Tittel.

MR. TITTEL: I just wanted to mention one last thing, because someone earlier had mentioned about cars from out of state. Well, we will be getting the benefit from those cars who come from Massachusetts and New York, so hopefully it will offset the cars from Virginia.

ASSEMBLYMAN GUSCIORA: Thank you.

I'd like to invite up Jim Sinclair and Sara Bluhm from New Jersey BIA.

J I M S I N C L A I R: Thank you, Mr. Chairman. I'm Jim Sinclair. That's S-I-N-C-L-A-I -R and--

S A R A B L U H M: --Sara Bluhm -- B-L-U-H-M.

MR. SINCLAIR: And we're going to be very brief. We've heard a lot, and I know that there's more people that have a lot more factual information that we have. We have viewed ourselves in this process representing the 18,000-member companies of the Business and Industry Association, and, in fact, the whole business community, as consumers in this process. We've looked at it very carefully. There is arguments and a lot of rhetoric in this process. The bottom line for us, and we have a series of questions, and I know many of you have received that in our draft brief, that need to be answered in this process, in terms of public policy issue.

But what I heard today was that the California car, in terms of emissions over the short run, looks exactly the same as the national car. Our point of view, and it's been consistent for a number of years, what we need is strong national standards so that there's a level playing field. And if, in fact,

this emission that we're getting out of the process is the same, then why are we doing this? I mean, that's the question that every legislator will have to answer when and if they vote for or against this. What is the best thing for the environment?

I am familiar with the SIP, and I don't see a SIP reduction in this program for New Jersey. I could be wrong, and I am really open to learning about this process and understanding what the information is. We would like New Jersey dealers to be competitive in the region and to be able to sell cars to people in Pennsylvania. We would like the manufacturers to drive the technology to the best place. But I can tell you this, and the reason Sara and I are up here today, is that we have spent the last year and a half with the Congestion Busters Task Force. You'll probably hear about this more when the DOT gives its report to the State.

But we've looked at congestion in the state, and what it is that you can do. We've looked at what has happened, and what has happened is that the number of cars and the number of drivers have increased, and it will increase. The number of miles traveled in the state has increased, and it will increase. The quality of the cars, as you've heard, the national car has improved, and we've seen that technology that we have imposed at a great cost to the State, in terms of the emissions, the I&M program, doesn't quite get us the bang for the buck that we thought it was doing, because technology evolved on the national level and moved forward and improved the fleet.

There are things that we can do in the state. Clearly, if we can have an attractive alternative to all of those people out in their single passenger vehicle to get around the state, a better mass transit system that has room for

people during rush hour, that goes places where people want to go, that provides that attractive alternative is the way to build the future. Clearly, that is you look for what a bottom line -- either that or restrict the number of licenses that you have out there, the number of cars on the road, if you want to make a dramatic reduction. But that is a politically insensitive suggestion. But in terms of actually solving the problem, making real measures, that is the kind of thing that could and may happen in the future. That may be an option for some future legislature.

One last issue about this, and I don't know, maybe you're as confused as I am about this, but how can there be a 27 percent reduction in whatever the pollutants that we were looking at, if it's the same level of reduction that we're getting? And, if we're talking about the zero emission vehicle part of the program, if it's only 2 percent of the-- If we're having a thousand cars, and I think that's what we were talking about, in a pool of 6 million, how does that get you 27 percent reduction in those air toxics? I don't understand the numbers. I don't understand what they came from.

We met with the PIRG people. We asked them to explain to us, and Jasmine was a very nice lady who took us all through the thing, but never came back to us with the data on that. I'm open. Perhaps, they are right, but I don't think they are. I think that this is sort of marketing numbers that they're using, for whatever purposes, to push an idea.

As Jeff says, it's a good idea, and we ought to do something nice -- give the impression that we're doing something nice. But the reality is are we just giving the impression that we're doing something nice, or are we actually doing something nice?

So, Sara, I don't know if you want to add anything to that, but thank you very much.

MS. BLUHM: I would just say, in the context of the car situation from our work on the Congestion Busters Task Force, you really have to look at the state overall in different transportation and is this another area that you are wishing to subsidize? We have mass transit subsidization. We have highway subsidization. And in looking for Federal grant money, I know that President Bush put $1.5 billion into fuel cell research. Is New Jersey going to be willing to put money in the subsidization of the recharging centers?

When I was looking at California, and I was looking at some of their recharging stations -- they had three at a mall. What New Jersey mall can you go to and only be able to know that you can park at three parking spots? Things like that to translate them into New Jerseyans' lifestyles, and how much is the State going to be willing to step up, as a benefit to consumers, as well to benefit the environment. I think you just need to look at the different aspects this is going to take on.

I know, as Jim and I have looked for solutions, we've looked at car pooling that had to subsidized. We've looked at the different MTAs around the state and what they've had to do to get out there -- HOV lanes, or if Jim and I are going to the same meeting, instead of taking two cars, let's take one. But the different steps that we've had to change in a New Jersey person's lifestyle, I think that there's going to need to be some more steps if we're going to go on an alternate plan. I think a lot of times it's easier to stick with the national model, because that's what everybody is seeing.

I know, even just looking in New Jersey's TV markets, we have New York and Philadelphia stations, but if I know that all my cars are the same or if I want to drive over to Pennsylvania that I know I'm going to be able to park my car at different places. Just on the side of business, as a consumer, too, what we're going to have to do for our employees to have them be able to drive to work in a manner that they choose to. Right now, many of our employers have the van pools. They give out transit checks. Things like that, and the different accommodations that we're trying to make for a cleaner environment, as well. This is just another consideration for us.

And so as you think about the impacts of California cars, we'd also like you to think about the impacts it's going to have on business and consumers with this decision.

MR. SINCLAIR: The Chairman's bill on supporting cutting technology is a way where government can step up with fleets and make an investment, if it seems, from a dollar and cents standpoint, to be a good investment, to push forward, to lead the way.

ASSEMBLYMAN GUSCIORA: Thank you.

Any members have any questions?

MS. BLUHM: Thank you.

MR. SINCLAIR: Thank you.

ASSEMBLYMAN GUSCIORA: Thank you.

We have Jane Nogaki, but I understand she's already left.

UNIDENTIFIED SPEAKER FROM AUDIENCE: She'll be back.

ASSEMBLYMAN GUSCIORA: She'll be back, okay.

Alan Kaufman, CWA, to testify in favor, has already left.

The Reverend Joseph R. Parrish Jr., from St. John's Church, in Elizabeth and with New Jersey Environmental Watch.

Welcome, Reverend.

REVEREND JOSEPH R. PARRISH JR.: Thank you.

I feel like part of my job is to apologize for God making last summer hot. That's not why I'm here.

I know that weather can show what extremes emissions can come out of cars, because things are hotter, gasoline is more volatile, and so forth. But the fact, as the prior two people said, there is clearly the increase in the number of cars and the number of miles traveled, and that's what we're looking at here. So what we're looking at in 2002 will simply be a standard in a few years, maybe five or six years. So we're simply getting a snapshot of what was going to happen in the future if we do nothing. So that's where we sit here.

The question is what should we do? Now, Assemblyman Kean's idea and the other bill are all trying to come up with a method of cleaning the air from car emissions. I am the Rector of a church in Elizabeth, New Jersey. We have about -- I figure about maybe 30 lanes of traffic traveling through the city of Elizabeth -- north, south, east, and west -- because we have a 14-lane New Jersey Turnpike. We're right at the edge of the Garden State Parkway. We have Route 1 and 9, and we're the dead end of the Staten Island Expressway, where all the traffic coming from Long Island and Brooklyn, Staten Island, dead ends into Elizabeth. So we have a huge-- We're also just like the communities in Bergen County, near the George Washington Bridge; we're hugely impacted by the traffic in the State of New Jersey.

We've done sort of local statistics on how many of our children have asthma, and in our Sunday School, we have 40 percent. We've done some focus groups in other neighborhoods, and it's about 20 percent, and sometimes 30 percent in certain neighborhoods, and a comparable amount for some of the adult populations, around 20 percent. So the cost in job loss, time loss of working in jobs, is enormous with the State of New Jersey, based on the asthma. We have some of the highest asthma rates in the United States, if not in the world. So asthma is a big factor in the health of the people.

The question is, how do we control that? I know only two-thirds of it's within our grasp, and we're always trying to get Pennsylvania and Ohio to change their power plants and so forth, but the question is still, what can we do within New Jersey to lower the asthma incidence? The other finding -- I've been in my church 13 years -- is that I bury three people with cancer for every two people with heart disease. It's a very odd statistic, because the rest of the country is the other way around. It should be three heart diseases for every two cancers. So I know that the cancer incidence is high in my specific population there, and it seems to be true for other people throughout the city of Elizabeth, Linden, Rahway, and so forth.

So I know the cancer incidence is clearly high. Now exactly, precisely, what the number is, I don't know, but I know it shouldn't be the way -- the statistics should not be the way that I see them. So I thought one way to approach this problem for this Committee is if we have any kind of leverage with the major automobile companies, this Committee could use that leverage to perhaps, maybe, even create jobs within the State of New Jersey by requiring them to do the research on these low emission vehicles in the State of New

Jersey to create jobs. If we're going to subsidize the purchase of cars from the State budget, be sure that that ends up in being jobs of New Jerseyans getting employed and perhaps creating a new high-technology industry right here in our state, which we need. We need more employment, especially in our area.

So I thought of some questions should be asked of the automobile industry which were not answered. I listened to the General Motors presentation. And Assemblyman Chivukula's chart, which they showed here, was unavailable to me, but I noticed it specifically had only data for NOx and not anything to do with benzene emissions or aromatic hydrocarbons and so forth. So they're showing the part of the picture that they want to show us and not the whole picture.

I've testified with the Blue Ribbon Panel of EPA in Washington before, and it's clear that if one took gasoline as a product and tried to put it on the market today, it would not pass any kind of health regulatory inspections. It is highly carcinogenic -- 25 percent of gasoline is benzene and aromatic hydrocarbons. Clearly, the most carcinogenic mixture of anything known in the United States today available to the general public is gasoline. So we're using this gasoline to power our industry, getting people to work, and so forth. The question is how can we stop the growth of the emissions of benzene and aromatic hydrocarbons in our air? LEV is certainly one way to do it. ZEV would certainly do it completely.

So how can we reduce the carcinogens that are going into the air in the State of New Jersey. My insurance friends tell me we have twice as many vehicles per square mile in New Jersey as any other state. We're number one. We have more of the emissions of aromatic hydrocarbons and benzene

than any other state. We're number one. If we don't do anything about it, how can we expect somebody else to do something about it? We're tagging on to California, which has a problem in the Los Angeles area and some other parts, but we have major problems all because we're so populated in the State of New Jersey, so densely populated everything affects everybody. We don't have one little pocket and say, "It's really bad there and it's not bad here." We're between two humongous metropolitan areas, Philadelphia and New York.

So it behooves us to somehow use our -- what little leverage the State of New Jersey can get from either -- supporting these bills or something else to negotiate with the car manufacturers to come up with a better plan for reducing the emissions in the State of New Jersey. That's the bottom line. I think that's what we need to agree on. We have the leverage, possibly because we're one of fifty states. We're a significant state, and we have a significant technological background here that we can do things.

So my opinion is we have to somehow use these bills to come with an open mind and say, "Okay, we're going to pass this, unless you come up with another way of reducing the carcinogens and NOx in our environment." This is what we're going to do. Now you give us your alternative plan. Now, I'll use it as a negotiating strategy. That's the way I would approach it. If they don't think this is the right bill, show me how General Motors, Ford Motors, whoever else is going to be selling cars in New Jersey, how are they going to reduce a comparable amount of toxins out of the air as these bills are going to do?

That's the first question. Give it to them. They have the technology. They have the expertise. They got the scientists there and already employed. And if they listen to New Jersey, if we can get them to listen, if we can somehow strike a note here that they could create a listening environment from the industry, I think we could create good for New Jersey and eventually good for the whole American automobile industry.

So I'm the person who has to hold people -- well, their hands -- while they're dying. I've held a lot of people's hands while they're dying. I hate to say this, most of them because they're cancer, because I'm usually right there when -- because cancer is slow, and we know sort of when someone is going to die. I'm the person who has to go visit all these kids that are in the hospital. I had, out of 40 children in Sunday School, I had 16 kids who were going in and out of the hospital. I'm the person who has to go there personally to visit with those parents, and they're very grieved, you know, where they have an infant sitting there in intensive care on oxygen because they have asthma.

So I'm very personally acquainted with what happens when children are at risk and when adults die an early death. So I believe that we have to take this as a serious opportunity, that we're at the brink of doing something here which can make a difference. I hope you decide to do that.

ASSEMBLYMAN GUSCIORA: Thank you, Reverend.

Any members have questions? (no response)

Thank you very much for your testimony.

I'd like to invite up Greg Dana, Vice-President of Environmental Affairs, Alliance of Automobile Manufacturers.

G R E G O R Y D A N A: Thank you, Mr. Chairman, members of the Committee. My name is Gregory Dana. That's spelled D-A-N-A, and I'm Vice-President of Environmental Affairs for the Alliance of Automobile Manufacturers. We are a trade association. And since it was raised earlier, I do represent the traditional U.S. manufacturers, Asian manufacturers, and European manufacturers. I'll be very brief. Bob Babik covered much of this stuff I could cover here today. I don't want to repeat anything and waste any of your time.

Let me make a point, though, about the chart which has already been shown. All of you have it, and it's an attachment to my statement. What this does show, and it's already been pointed out, this shows both VOC, which is hydrocarbons and NOx emissions. So, it's the two smog conforming components that are covered by this. There's virtually no difference between the California and the Federal program. The good news is all cars nationwide are going to get much cleaner than they are today, and that's what we have to be worried about. Because when you're worried about cars traveling through New Jersey, every car from every state in the union coming through New Jersey would be much cleaner than it is today once these standards take effect in 2004.

Scott, put up the slides. (begins slide presentation)

We talked a little bit about what the impact of these standards are once they get in place. It takes about 15 years for car standards to take over the fleet. If you look, these are data out of EPA's rule making on heavy-duty trucks, when they look at the percentage of mobile source emissions from parts of it. There's two slides, one on VOCs and one on NOx. You'll notice that the

only piece of the pie that's shrinking considerably, over the time length of 2020, is cars and light trucks. That's because of Tier II Federal standards are having a huge impact on the emissions from these vehicles.

Put up the NOx, Scott.

Again, the same difference here. Whereas, by 2020, by rules that are already in place, nothing has to be changed, we're going to get those huge reductions in emissions from the Tier II program. I should probably -- the other from the Tier II program does is it reduces the sulfur in fuel. In my written statement, I point out that simply by taking the sulfur out of fuel, this state is going to see an immediate reduction of 10,000 tons of NOx in 2004 and 2000 tons of VOCs -- just like that, because of the impact of sulfur on the control systems in the cars.

Let me switch to toxics, which is an issue that's been raised before. In my statement, I'm going to briefly read a quote from what I -- from an EPA rule-making on mobile source air toxics, which they completed. I don't have the exact date in my head here but-- What they say is the Tier II program for emissions control, which controls VOCs, which are a surrogate for air toxics, says, "By 2020, we project these programs will reduce the levels of on-highway emissions of benzene by 73 percent, formaldehyde by 76 percent, 1,3 butadiene by 72 percent, and acetaldehyde by 67 percent from 1990 levels. In addition, by 2020, on-highway diesel PM emission reductions of 94 percent from 1990 levels are projected in a recent NPRM for heavy-duty engines." That NPRM has been finalized. Those rules are in place. We will see huge emissions reductions of PM from heavy-duty trucks and buses because of that rule making.

On ZEVs, we've discussed this a lot already. I won't waste much more time, simply to say that we don't believe full functioning, battery electric vehicles will ever make it in the market place. In fact, it's pretty clear from what California has been saying in the public press so far that they're not even clear that they're going to continue with that path at this point in time.

Let me also make a point that has been made earlier, but to stress it, that New Jersey, in adopting California, basically has the control program taken over by the state of California. California changes its rules on a regular basis. And with all due respect to Representative Ahearn, you will have a net impact on the state because of that. You will have to have staff in this state who change the rules to be consistent with California. If you adopt the ZEV mandate that California has, you'll have to build an infrastructure.

California has spent an enormous amount of money and time putting in charging infrastructure, instructing fire marshals on how to deal with wrecked EVs and other things like that that they've looked at. They have spent over three or four years doing this and spending lots of money in trying to deal with all these issues. That's something else you'd have to consider in this state. And frankly, we think that's money ill spent for technology that isn't going to make it, when fuel cells are on the horizon, and that will require some infrastructure development for hydrogen fueling stations.

Let me summarize by just simply saying that I think you have a choice to make here. Do you sit with the Federal government program which is already in place, reduce emissions from mobile sources by over 80 percent from today, take effect, and benefit the state, or do you try and put in place

a California program, which will cost the state resources, time, and effort to achieve no difference in air quality? That's your choice.

Thank you.

ASSEMBLYMAN GUSCIORA: Assemblywoman Stender.

ASSEMBLYWOMAN STENDER: Thank you, Mr. Chairman.

You quote some tremendous reductions of some terrible toxics into our environment, but you're talking about another 20 years out.

MR. DANA: That will be the total by 20 years. Starting in 2004, those emissions reductions start happening right away. I give you the cumulative total, but--

ASSEMBLYWOMAN STENDER: Yes.

MR. DANA: --as every 2004-and-later car is sold, there will be a reduction of those emissions from those vehicles. So, as the fleet turns over, it will be better and better each year.

ASSEMBLYWOMAN STENDER: It just seems to me that another 20 years is a very long time to get to these improvements, considering that we've been having this problem with-- I mean, this whole thing with the emissions has been going on for about 30 years, and the car industry has dragged its feet all along the way--

MR. DANA: I disagree with that statement.

ASSEMBLYWOMAN STENDER: --and have dodged the bullets and don't--

MR. DANA: I'm sorry. I disagree with that statement, Representative.

ASSEMBLYWOMAN STENDER: You can disagree, but that's how I feel.

MR. DANA: Fine. It takes a long time to put in place vehicle emission control programs, because it takes 15 to 20 years for the entire fleet to turn over. So, to get the entire benefit of those emission controls, it takes that long, simply because people don't all buy a new car today. People buy cars over time. There's no other way to do the emission control program for cars than for that way to operate. It takes a long time to happen. There are very few programs you can put in place today that get huge emission reductions immediately.

ASSEMBLYMAN GUSCIORA: Mr. Dana, you talked about a substantial reduction in benzene. Is that under both California LEV II and the Federal Tier II?

MR. DANA: I was quoting to you from the Federal rule making on toxics for the Tier II program. But I would expect a similar reduction would occur in California, because both programs control volatile organic compounds or hydrocarbons which are surrogate for air toxic emissions. That's where a lot of the toxics come from.

ASSEMBLYMAN GUSCIORA: Again, what's the difference between the California standard and the fed standard on benzene, because we have testimony -- just the one before you that--

MR. DANA: There isn't a Federal or California standard on benzene. There's not a standard, per se. What I'm saying is that the controlling emissions of hydrocarbon emissions from vehicles reduces the

benzene from the tailpipe. I don't have a direct comparison of California versus Federal controls.

As someone said earlier, the Federal program is NOx based. It's a NOx averaging program. The California program is a hydrocarbon based or hydrocarbon averaging program. It makes explaining it in English difficult to do, that's why I showed the graph of the modeling, because it shows you in air quality terms what happens. But basically, even though they focus on different pollutants, the emission levels of the vehicles are very, very similar in Federal and California, because the actual emission numbers we have to certify to are almost identical in Federal and California.

ASSEMBLYMAN GUSCIORA: Further questions, Assemblywoman.

ASSEMBLYWOMAN STENDER: No, thank you.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Dana.

MR. DANA: Thank you.

ASSEMBLYMAN GUSCIORA: Jane Nogaki has rejoined us. Now we submitted the statement of Jennifer Vickers into the record, so you're more than welcome to testify in your own behalf.

J A N E N O G A K I: I'll just be very brief. On behalf of Jennifer and myself, we are both Toyota Prius owners. I've had my car about six months. It cost me $20,000, but I get a $2000 tax credit on it. I've about 10,000 miles on it. I'm a heavy driver, but I've reduced my gasoline usage by half, okay. I get about 47 to 49 miles per gallon. In traffic, the car is running on electric. So, when I'm sitting at a stop light, stopping at my mail box, cruising into my

driveway and garage, I have absolutely no emissions coming from this vehicle at all.

It was easy for me to get this car, although I had to order it and wait a little bit. It was available at a local dealer, it's going to be serviced by a local dealer. The availability and the price range made it convenient and easy for me to be a good saver of emissions in the environment, and I fully support this legislation. I think it's going to be a needed driver to make more of these kinds of vehicles available. If we can get off gasoline altogether and go to total electric or fuel cell, all the better. I'll buy that car, too.

Thank you.

ASSEMBLYMAN GUSCIORA: Thank you.

Any questions?

ASSEMBLYMAN CHIVUKULA: Mr. Chairman?

ASSEMBLYMAN GUSCIORA: Assemblyman Chivukula. For the record, I just want to introduce you.

ASSEMBLYMAN CHIVUKULA: Mr. Chairman, thank you. I did drive that car. It was a very nice car -- the Toyota car. How many places do you have to go to get that car fixed? Do you have to go to special places?

MS. NOGAKI: Yes. But I'd say there's probably a dealer in every county that's available. And you can go on the Internet, and they can tell you where the nearest dealer is to you. For instance, I live in Marlton. I go to Cherry Hill Toyota.

ASSEMBLYMAN CHIVUKULA: So you have to go to a special-- Not all dealers handle--

MS. NOGAKI: Not every Toyota dealer has it, but a number of them do.

ASSEMBLYMAN CHIVUKULA: Oh. I'm thinking of buying one of those.

MS. NOGAKI: Okay. I have the vehicle down in the parking garage. If anybody wants to see it, take a test drive.

Thank you.

ASSEMBLYMAN GUSCIORA: Thank you, Jane.

Michael Egenton from the New Jersey State Chamber of Commerce.

M I C H A E L E G E N T O N: Thank you, Mr. Chairman. I'll be brief. Michael Egenton, E-G-E-N-T-O-N. I'm Assistant Vice-President with the New Jersey State Chamber of Commerce.

I'd just like to capsulize, probably, our guiding principles on the issue at hand here today, first being that the State Chamber encourages voluntary programs and incentives, but we oppose mandated programs. Second, we support Federal standards, as opposed to a piecemeal approach that is subject to only a handful of states. Third, we support encouraging the midwest and South to install state-of-the-art equipment and come up to speed with New Jersey's rigorous clean air standards. Fourth, the Chamber, while recognizing the need to reduce mobile emissions, supported a few years ago and started the coalition to support the inspection maintenance program.

Our President, Joan Verplanck, joined with a representative of the medical society and touted it as a sensible way to tackle mobile source emissions. And we also did that at a time when it wasn't politically acceptable,

so we saw how important it was for the business community to step up to the plate to reduce mobile air emissions.

That's, as pointed out here today, given the current budgetary problems in New Jersey, the question still remains whether our state could financially support a California mandated program. Also, the reliability and cost of the California electric car remains, while a lot of the vehicles that were mentioned here today are the hybrid vehicles that have been tested, have been seen to be affordable and reliable.

And finally, Mr. Chairman, I wanted the Committee to note I'm an active member of the New Jersey Clean Air Council at the DEP. I felt it was important to share our recent report that we submitted to Commissioner Brad Campbell back in July. We had a number of the groups that were here today testify before the Clean Air Council on this very same issue. I submitted copies of the report to the Committee.

I just wanted to point out that there are a number of individuals that serve on the Clean Air Council from the medical profession, academia, environmental business, and such. And after careful analysis and study of the issue at our hearing back in April -- and we submitted this report in July -- the Council concluded that the adoption of the California LEV II program is not feasible at this time. Although the LEV II program represents innovation, the Council is convinced that many problems serve as barriers to the implementation of an adopted program. The LEV II program is very complex and still evolving.

In order to adopt, New Jersey would have to provide auto manufacturers a two-model-year lead time, and in order to withdraw, a

two-year transition again. Changing programs in any shorter time would be in violation of Federal law and could provoke a lawsuit. California has costly public outreach and has expended large sums for the purchase and lease of ZEVs at all levels.

In this period of fiscal distress, New Jersey may not be able to undertake this expensive program. The Clean Air Council believes that the present Federal Tier II standards, as they take effect in 2004, will show significant air quality improvements.

Finally, the Council is disturbed that New Jersey would be completely subject to decisions made in California. I'd add, Chairman, luckily we didn't follow California's route on electric deregulation, or we'd be experiencing their problems.

Participation in the LEV II program does not offer any flexibility of participation in the decision process in California. The Council cannot recommend participation in LEV II at this time. Although the Clean Air Council can't recommend participation in the LEV II program, it does recommend the DEP focus on technological innovations already developed in the California program. To a great extent, these new technologies have doubled operating efficiency of advanced motor vehicles, and those would be the hybrid vehicles, the fuel efficient vehicles, and fuel cell technology.

And then we went on to make other recommendations to help with the overall. Because I think the goal here again is, what are we doing about mobile sources? Jim Sinclair mentioned the Congestion Busters Task Force, of which I'm also a member. You're not going to get people out of their

vehicles in New Jersey, so you have to come up with innovative ways to tackle the problem and the issue at hand.

The Council recommended that the state begin to retrofit its diesel fleet in order to reduce fine particulate emissions and the use of bio-diesel fuel to reduce such emissions. Another recommendation that we said was that the public policy in New Jersey should be to increase the utilization of public transportation to maximize to that extent possible. This policy should encourage more light rail projects, as a way to help people get around here in the State of New Jersey.

The Council also recommended and continues to support a statewide public awareness and education program with emphasis on the impact of automobiles on air quality in general and air toxics in particular. And finally, we had another recommendation about continuing our support for the enhanced I&M, inspection and maintenance program. From what I understand from DEP, one area that they're going to be looking at is diesel emissions, which was discussed here today.

In any event, in summary, I just wanted to share this report. I thought it was important for the public record. Again, as I pointed out, the business community recognizes there is a mobile problem here. We're trying to tackle it in other innovative ways. But I think, again, in philosophy, and I think you know, Chairman, our history that across the board in anything, when we had the mandated employer trip reduction program years ago, we had problems implementing that, because peoples' schedules at the time were inflexible. But now we're revisiting that issue through the Congestion Busters Task Force looking at ways for people to telecommute to get cars off the road.

I think that goes to the source of the problem to clear up the air emissions here in the state.

That's it.

ASSEMBLYMAN GUSCIORA: Thank you, Michael.

Any questions from the members? (no response)

Thank you very much.

MR. EGENTON: Thanks.

ASSEMBLYMAN GUSCIORA: Is Michael Calvin from the American Lung Association? (no response) He submitted testimony from the American Lung Association that I will submit into the record.

Juliet Burdelski from INFORM, Inc.

J U L I E T B U R D E L S K I: Good afternoon. Thanks for having me and allowing me the opportunity to testify on behalf of INFORM. My name is Juliet Burdelski, B-U-R-D-E-L-S-K-I. I'm the Director of Urban Outreach for our Sustainable Transportation Program. I do have some prepared testimony I'll turn in to you. I just wanted to call up a few more points that have not been covered.

INFORM is an independent, nonprofit research organization that has examined the effects of policies and business practices, not only on our environment but on public health. We have been a leading authority on alternative fuels throughout the U.S. In the year 2000, after New York state passed its LEV II program, we did have the opportunity to research the benefits of that program. There are three points that I wanted to call your attention to that we feel are the biggest benefits of the LEV II program versus the Federal program.

First of all, as was discussed, LEV II does offer more evaporative emission reductions than the Federal program. That was clearly stated. The second point is that the LEV II program and the California program -- the emissions regulated include NOx and air toxins, where in the Federal program, just NOx is regulated. So, in effect, what that does on the light-duty side, if you have the California program, it will effectively not encourage the use and expansion of diesel-fueled light-duty vehicles. That is a big policy issue right now at the Federal level. There are some automotive interests that are interested in getting more light-duty diesel vehicles on the road to increase the fuel economy standards for their overall fleet.

So this is one of the concerns of our organization, because, in fact, the LEV II program would effectively knock out the continued expansion of light-duty diesel vehicles. And as we now know, and as the environmental groups well know, the diesel fuel is the problematic fuel from the toxic perspective. EPA has said that diesel particulates are carcinogenic. CARB has stated there are 41 components of diesel fuel which are carcinogenic. So that's a real problem, so that you should be aware of.

Finally, the biggest benefit of the LEV II program that we do see is that it does create that 10 percent, that opportunity for the expansion of advanced vehicle technologies. There is no question that in California and New York state and Massachusetts, the existence of the LEV II program has been the technology driver, where there's been a lot of debate about what technology is the best technology. There is really no question. California has 73,000 alternative fuel vehicles on the road today and is expanding. The state of New York has over 12,000 alternative fuel vehicles on the road. Governor

Pataki has said that by 2010 all of the state vehicles purchased will be alternative fuel vehicles and clean fuel vehicles. They are making strides.

In comparison, New Jersey has lagged far behind. There are less than 5000 alternative fuel vehicles on the road in New Jersey, many of those vehicles are, in fact, bi-fuel, and they're not providing any benefit in terms of air quality, energy security, air toxic reduction. So, in fact, these programs have been technology drivers, and you just cannot discount that fact, even though the auto manufacturers will tell you that they don't want the environmentalists driving the market, there's no question that the availability of the hybrid electrics, the compressed natural gas vehicles have been driven by the mandates in California.

This is one area that New Jersey really, again, lags far behind. The creation of this program here could help drive this market. Why is this so important? The manufacturers talk about getting to a hydrogen economy. You can't get to a hydrogen fuel cell vehicle overnight. You do need interim technologies to get you to a hydrogen fuel cell. Those technologies are still 10 to 15 years out, at minimum, as a commercially viable technology. You need fueling infrastructure developed.

The Department of Energy has said that natural gas reformed off-board the vehicle will likely be the transition fuel for hydrogen. So you need those transition technologies to get you to the next wave of the hydrogen fuel cell vehicle. It's not going to happen overnight. That is, again, why it is so important that these programs are put in place today so that we can get to those technologies of the future.

That's really all I had, and again thank you very much, and if you have any questions, I'd be happy to answer them.

ASSEMBLYMAN GUSCIORA: Thank you.

Are there any questions?

ASSEMBLYMAN CHIVUKULA: Mr. Chairman?

ASSEMBLYMAN GUSCIORA: Assemblyman Chivukula.

ASSEMBLYMAN CHIVUKULA: I just want to make a comment that there is this technology in search of a market and market in search of a technology. See, there's always this conflict. I just want to bring, for the record, that the United States RCA Corporation has dealt with digital technology, digital television in the 1980s, and still today we do not have digital television. If you go to the stores, you can buy high-definition television, but you don't have the transmission from the broadcast networks. So you need to have the balance between the market. If you have a zero engine rate out there and there are no buyers, it's not going to be successful.

ASSEMBLYMAN GUSCIORA: Thank you.

The last two people that signed up to testify -- I guess we can call them up as a panel because of time. David Pringle from the New Jersey Environmental Federation and Michael Skelly Sr.

Did I miss anyone? (no response)

Okay. Great.

D A V I D P R I N G L E: Thank you, Mr. Chairman. I'll be very brief.

I recognize this is a complex problem before you. There's no magic bullet. There are multiple problems to our air pollution. There are multiple solutions, and it's our position that the clean car legislation is a key

aspect to that. I would also like to note that this is a bipartisan effort, despite the stickers. It was an oversight. Assemblyman Kean's bill should be recognized.

To highlight that this goes back, I sent out an e-mail alert to a number of folks asking them to come down. One of the respondees was former Assemblywoman, and now the Chair of the Garden State Trust, Maureen Ogden, a fine Republican on the environment. I will submit her e-mail into the record, but she concludes that with the passage of A-2439, S-121 will be a significant step towards achieving our clean air goals.

I also have before you, and many of you have been, I'm sure, the happy recipients of, over the summer, multiple letters on a variety of bills in bulleted form, but clean cars are a major issue for us. These letters are from approximately 40 different towns. There's about 300 of them in there to the legislative leadership, as well as legislators from their home constituents. The public, in our experience -- and we're knocking on doors throughout the summer -- understands the connection between cars and pollution, understands that despite some folks' beliefs to the contrary, California, New York, and Massachusetts are not sadomasochistic. They wouldn't be doing this, they wouldn't be spinning their wheels investing time and energy if there wasn't a demonstrated air benefit. The demonstrated air benefit is, as our friend Bill Clinton would say, "All depends on your definition of is."

In this case, the Tier II is talking about volatile organics. In LEV II, we're talking about a broader definition that includes volatile organics, but other organic compounds under the term nonmethane organic compounds, that includes volatile organics, but other organic compounds that cause cancer

and cause smog. So all these fine charts and all that we've seen has been the equivalent of comparing apples and oranges to apples, tangerines, and bananas. It just can't get done.

In the interest of time, I have much more to say, but I'll just have two final notes. I would wish that -- the Chamber testified that they support voluntary incentives. New Jersey's recycling right, without a mandatory recycling law, would be effectively nil. The same goes here. I only wish that the Chamber in New Jersey would be successful in working with the chambers in the southwest and the midwest to get them to clean up their power plants, because they certainly aren't doing it. I only wish the Chamber, when energy deregulation occurred in New Jersey, supported our amendment that would of -- the one constitutionally, legal way for us to -- in New Jersey to clean up out-of-state power plants would have been for a provision to be provided in the energy deregulation a few years ago that would require electrical companies selling power in New Jersey to meet New Jersey's air standards, but the Chamber was one of the points in preventing that legislation from going through. So, unfortunately, the facts don't line up.

Finally, I also heard General Motors state that they couldn't get rid of their electric cars, and I'm just going to read a brief provision from PIRG's "Ready to Roll" Report. "During CARB's 2000 biennial review of the ZEV program, numerous individuals and fleet operators testified that they wished to purchase additional electric vehicles, but had been unable to do so. Among those wishing to purchase or lease electrical vehicles were lessees of GM's EVl, which is a subject if a safety recall by the auto maker. Lessees reported that they had been unable to lease another EV, either from GM or

other auto makers. Representatives of 14 corporate and government fleets, Southern California Edison, which had planned to put an additional 200 EVs per year into its fleet; and CARB itself, which had been unable to obtain enough electrical vehicles for its programs."

So I urge the Committee to carefully look into all the information. It is a complex problem before you, and just please also remember the history of the American car industry. They opposed seat belts. They opposed safety glass. They opposed air bags. They opposed fuel efficiency standards, and they opposed catalytic convertors, all saying it couldn't be done, and we are safer and in a more environmentally friendly place as a result. Yes, our air is in many ways better than it used to be, but it's still unhealthy, and we need to do a lot more. Senior citizens with emphysema and children with asthma need this legislation, and I urge you to expedite passage.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Pringle.

Mr. Skelly.

M I C H A E L S K E L L Y SR.: Yes, good afternoon. My name is Michael Skelly, S-K-E-L-L-Y. I come to you as a private individual citizen who is on both ends of this problem. On one end, my wife is a sufferer of asthma, and, therefore, throughout the entire summer she had to hide indoors and reduce her activity, and her entire lifestyle is completely wrapped around the ability as to whether she's going to gulp the next breath of air, and that is a significant problem, not only in our household, but I work actively with a number of youth organizations and school educational programs. The kids are coming to us in greater numbers, every day, ill. Their education is being

harmed, that means our entire society is being harmed, because they're being held back by the air that they breathe.

This is a very real issue. This is a an opportunity for the Legislature to step up and to do something right. I realize that there are many other opportunities dealing with diesel, large vehicles, etc., and those concerns will come to this table another day. But as for this particular range of vehicles and this particular range of pollutants, this bill that is proposed is the right solution within the limits that we're having presented to us. The limits have been largely designed and ruled by the efforts of industry and others who are not in favor of this.

Do I need to go to GM and ask for relief, or do I need to go to the New Jersey Legislature that is charged to protect the health, safety, and welfare of its citizens? That's my question. I think, frankly, I'm in the right place. The New Jersey Legislature is the right place to deal with this issue, and I should not have to beg, on hands and knees, for the next gulp of air from GM.

On the other side of the question, I work with environmental groups and educational organizations on advance technology vehicles, including the American Tour de Sol, including Eco Living Fellowship with its eco drive, and this past year, in the month of May, a handful of high school and college students and home school students came together, along with volunteer engineers. We scraped together a 1981 Ford pick-up truck, which was donated. We got batteries. We got fuel cells. We got a hydrogen fuel tank. We pieced them all together, and as a result of less than six months work in a freezing cold garage, we were able to assemble and build and operate a fully functioning electric vehicle that is zero emissions, that is fueled by

hydrogen fuel cells, and also supported by a solar array, which we dragged around on a trailer, for the purpose of demonstrating that you can have a solar hydrogen economy, and it can all be built right here in the State of New Jersey.

The help that we received was from companies that are right here in New Jersey, such as Age Power. They manufacturer fuel cells. The help that we received was also from PV, or photovoltaic manufacturing companies, including one of the leading companies here in New Jersey is EPV. We're talking about the possibility of creating a home-grown industry right here in the State of New Jersey and improving the health of its people. I see that as a win-win situation. I see that if we can have high school kids lead the way to show GM that their vehicle makes 40 miles, that their vehicle -- that's a hydrogen fuel cell vehicle with millions of dollars behind it has roughly the same performance level or less than the one that we created on a shoestring budget and in less than six months time.

What does that say? It says the technology is ready. What's not ready is the market place, and the reason it's not ready is because the manufacturer has controlled the product supply. High school kids can't manufacture sufficient quantity to meet the ZEV requirements of the State of New Jersey, but GM and all the other manufacturers can.

So I would say that I support this legislation, and I ask the Legislature to move forward on it. And also, I want to say thank you very much for all the people who have cosponsored these two bills. That's what leadership is all about. I showed this to the kids that were in the program. They said, "What's going to happen to my world and my air?" And I said,

"There are good people who represent us in our Assembly and in our Senate, and they're headed in the right direction."

So I realize that this is all part of a process, and I'm very grateful that we're moving forward on this. I would like to be able to report back to them before December, to these children and to the members of the community, that the Legislature has passed this important piece of legislation and that a few years down the road the next gulp of air will be a cleaner one.

Thank you very much.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Skelly and Mr. Pringle.

I just want to take the Chair's prerogative to conclude this. If any members want to have a statement, they're more than welcome. From here, it was a great discussion on both sides. I think there is a lot of food for thought for us to go back-- And I don't know if the decision is definitively made tonight, and I think we're all probably going to look for some more homework.

I think the biggest question that I have, and I'm not asking it to be answered today, but in the coming weeks, and I think it was put out by Ms. Burdelski from INFORM. She said there were three points, three differences between California and the Tier II Federal standards. I still am left with the question, what does that mean, and at the end of the day will New Jersey air be any cleaner and by how much? So I put that challenge to the proponents of this legislation -- I'm a cosponsor -- to what is the actual difference between California II and Tier II and how much more cleaner will our air be and by how much?

Secondly, we've talked a lot about that EPA chart. I hope, now I know my good friend, Assemblyman Chivukula, has agreed to put in the numbers. I hope people give him that data so that we can come to a comparison chart. Is it that much greater or is it, as the opponents say, that there's no difference between the two plans. So I hope that's answered in the long term.

I personally look forward to another hearing on this matter. I would put this up for a vote, but I think ultimately we're going to need to convince the members on, not only in this House, but the other House, to go along with this. But I think we need that data -- what's the difference? Is it that much better and by how much?

With that, I'd like to welcome any other comments anyone else has.

Assemblyman Chivukula.

ASSEMBLYMAN CHIVUKULA: Thank you, Mr. Chairman.

Earlier, when we started this Committee meeting, you said that Commissioner Campbell is in support of that, and I don't see any testimony from the DEP. I would like to get some document for the record.

Thank you.

ASSEMBLYMAN GUSCIORA: Yes, we'll convey that request. I think there was a lot of other things that were going on in New Jersey, so he apologizes for not having a written statement. He expressed support for it, and I look forward to a written documentation from the DEP in the coming weeks.

Anyone else?

ASSEMBLYMAN McKEON: Thank you, Mr. Chairman.

ASSEMBLYMAN GUSCIORA: Thank you very much.

This concludes this hearing.

(MEETING CONCLUDED)