

**MINUTES OF THE
SENATE COMMITTEE ON GROWTH AND INFRASTRUCTURE**

**Eightieth Session
April 4, 2019**

The Senate Committee on Growth and Infrastructure was called to order by Chair Yvanna D. Cancela at 1:09 p.m. on Thursday, April 4, 2019, in Room 2135 of the Legislative Building, Carson City, Nevada. The meeting was videoconferenced to Room 4412E of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. [Exhibit A](#) is the Agenda. [Exhibit B](#) is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

COMMITTEE MEMBERS PRESENT:

Senator Yvanna D. Cancela, Chair
Senator Chris Brooks, Vice Chair
Senator Moises Denis
Senator Pat Spearman
Senator Marcia Washington
Senator Joseph P. Hardy
Senator James A. Settlemeyer
Senator Scott Hammond

GUEST LEGISLATORS PRESENT:

Senator Dallas Harris, Senatorial District No. 11
Senator James Ohrenschall, Senatorial District No. 21

STAFF MEMBERS PRESENT:

Marjorie Paslov Thomas, Committee Policy Analyst
Darcy Johnson, Committee Counsel
Debbie Shope, Committee Secretary

OTHERS PRESENT:

Tyson Falk, Tow Operators of Northern Nevada
Lucas Foletta, Nevada Resorts Association
Drew Ribar, A and A Towing, Tow Operators of Northern Nevada
Michael Baumbach, Milne Towing Services

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Dylan Shaver, Director of Policy and Strategy, Office of City Manager, City of Reno

Jose Norena, Big Valley Towing

Chuck Callaway, Police Director, Las Vegas Metropolitan Police Department

Todd Hartline, Captain, Nevada Highway Patrol, Nevada Department of Public Safety

Rod Shilling, Assistant Chief, Traffic Operations Engineer, Nevada Department of Transportation

Joey Cruz

Theodore Nededog

Milagros Lozada

Maria-Isabel Alvarez Poldrañ

Thomas Martin, Management Analyst III, Management Services and Programs, Department of Motor Vehicles

Michael DeLee

Kyle Davis, Nevada Conservation League

Christine Saunders, Progressive Leadership Alliance of Nevada

Patrick Donnelly, Center for Biological Diversity

Judy Stokey, NV Energy

Carolyn Turner, Nevada Rural Electric Association

Neal Tomlinson, Hyperion Advisors

Mulugeta Abraham, Abraham Limo Vegas

Brent Carson

Mulugeta Bour, Stardust Transportation

Christian Sastoque

Aesha Goins, Green Bridge Consulting Group

Will Adler, Scientists for Consumer Safety, Delta Nine Group

Megan Ortiz, American Civil Liberties Union of Nevada

Corey Solferino, Lieutenant, Administrative Bureau, Washoe County Sheriff's Office

Eric Spratley, Nevada Sheriff's and Chiefs' Association

John T. Jones, Nevada District Attorneys Association

Illona Mager

Gerard Mager

Matthew Walker, Nevada Dispensary Association

Lea Cartwright, Nevada Chapter of the Associated General Contractors

Josh Hicks, Nevada Homebuilders Association

Joseph H. Cain, Solar Energies Industries Association

Don Tatro, CEO, Builders Association of Northern Nevada

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Jessica Ferrato, Solar Energy Industries Association
Jamie Rodriguez, County Manager, Washoe County
Tom Polikalas, Southwest Energy Efficiency Project
Cameron Dyer, Western Resource Advocates
Les Lazareck, Home Energy Connections
Ron Lynn
Kathy Clewett, City of Sparks
Dylan Sullivan, Senior Scientist, Natural Resources Defense Council
Steve Dubin, Rmax, Inc.
Jerry Stueve, Director, Building and Fire Code Official for Clark County
David Bobzien, Director, Governor's Office of Energy

CHAIR CANCELA:

We will begin with the work session on Senate Bill (S.B.) 358.

SENATE BILL 358: Revises provisions relating to the renewable energy portfolio standard. (BDR 58-301)

While we wait for Senator Spearman, Senator Denis we will open the hearing S.B. 395.

SENATE BILL 395: Revises provisions relating to the towing of motor vehicles. (BDR 43-822)

SENATOR MOISES DENIS (Senatorial District No. 2):

In *Nevada Revised Statutes* (NRS) 706.131, what we know as tow trucks are called tow cars. Pursuant to federal law, towing services are divided into two categories. The first is known as consensual towing services where a tow car tows a vehicle at the request of the vehicle owner or insurance company. The second type of tow is known as nonconsensual tow. This is when someone other than the owner requests the tow. This type of tow happens when a vehicle is illegally parked or abandoned.

The rules and regulations in existing law for these nonconsensual tows are in part the subject of this bill. Tow trucks are especially vulnerable to a collision when they are assisting in the removal of disabled vehicles from the side of roads. The law mandates the tow truck be equipped with flashing amber warning lights. These lights must be displayed to warn approaching drivers under certain circumstances. This bill authorizes tow trucks to display

nonflashing blue lights in certain circumstances. The blue light is an additional tool to help protect tow truck operators.

For your information, blue lights can be seen from a further distance. It is a safer light to use. The first part of the bill authorizes the tow car to display nonflashing blue lights. The second part of the bill relates to nonconsensual tows.

Section 1 of the bill adds the display of nonflashing blue lights to the circumstances under which a driver approaching a traffic incident must take certain precautions. These precautions include decreasing the speed of the vehicle, proceeding with caution and being prepared to stop.

Section 2 provides a tow car equipped with nonflashing blue lights to be displayed to the rear of the tow car when at the scene of a traffic hazard. Such lamps must comply with standards approved by the Department of Motor Vehicles.

Section 3 authorizes a tow car to be equipped with rear facing lamps which emit nonflashing blue light. Such lamps may only be displayed at the scene of a traffic incident or when the tow car is otherwise preparing to tow a disabled vehicle.

Section 4 of this bill provides a property owner only has to notify local law enforcement of a nonconsensual towing if the tow operator has not already made such a notification. The section further provides that the cost of disposing of the vehicle, in addition to the cost of towing and storage of such a vehicle, will be borne by the owner of the vehicle.

The second part is if someone leaves a car in a parking lot, such as Walmart. Walmart wants to get rid of the vehicle but cannot because it is ruined. It is not worth a whole lot of money. Right now it cannot be towed, because it is not worth it. Walmart is willing to pay money to have it removed. That is what this is trying to get to so that vehicle can be removed.

Last, this section provides that if the estimated disposition value of the vehicle is less than the estimated cost for towing, storage and disposition of the vehicle, the tow operator and owner or person in lawful possession may enter into an agreement. This allows them to make a voluntary payment to the tow

operator. Such payment does not reduce the amount of the cost incurred by the owner of the vehicle and may not be a condition for the towing of the vehicle.

TYSON FALK (Tow Operators of Northern Nevada):

This bill is largely in two parts, as Senator Denis has mentioned. The first allowing the blue lights. I have some prepared remarks ([Exhibit C](#)) and I will just highlight those. There are some statistics I would like to point out.

It is reported that between 2011 and 2016, the number of deaths translates to an annual average fatality rate of 43 deaths per 100,000 workers. That is 15 times the rate of deaths for all other private industries combined. The life of a tow operator is precarious. They are on the side of roadways with speed limits of 55 miles per hour plus; it is common in the worst conditions. Cars have been wrecked because of inclement weather conditions in a lot of cases, particularly in northern Nevada during snow storms.

I would also point to a study done by Texas Agricultural and Mechanical University that looks at traffic safety. The study concluded that blue lights especially at night, when combined with amber lights give the greatest visibility. Motorists can then see the situation and give themselves time to prepare to slow down and move over.

There was a precedence last session for Nevada Department of Transportation (NDOT) to be able to have their vehicles equipped with a similar blue light, The NDOT cited some of the same statistics. Tow operators are right there along with NDOT in a lot of cases.

We are aware that NDOT will be proposing an amendment. It will be to include their Freeway Service Patrol (FSP) vehicles to have the nonflashing blue lights. I believe those were inadvertently left out at the last Session. We are in support of that as well.

The second part of the bill deals with abandoned vehicles. This is a problem that is increasing in the State. In northern Nevada it is acute.

CHAIR CANCELA:

I am going to interrupt you, and we are going to close this hearing on S.B. 395 and complete our work session.

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MARJORIE PASLOV THOMAS (Committee Policy Analyst):

There is one bill which is S.B. 358 and it revises provisions relating to the renewable energy portfolio standard. It was sponsored by Senator Chris Brooks and heard on Tuesday, April 2, 2019. There are attached amendments behind the second page. The first one is a conceptual amendment concerning public utilities by the Nevada Rural Electric Association. Those are on pages 3 and 4. Following those is the amendment that Senator Brooks proposed during the hearing, ([Exhibit D](#)).

CHAIR CANCELA:

I believe that one amendment was repealed and Mr. Foletta will explain why.

LUCAS FOLETTA (Nevada Resorts Association):

The Nevada Resorts Association has decided to remove or rescind its amendment. Recently there was a regulatory order issued by the Public Utilities Commission of Nevada. It makes the application of that language to at least one member of the industry arguably inapplicable. As a result of this order, it means the amendment we proposed would not have the effect it was intended to have.

To avoid proposing additional language to try to adjust or modify what happened in the order, we have re-evaluated the proposed amendment and decided it was prudent to remove the amendment. We will be working through the compliance issues in other ways, outside of the bill.

At this point, the Nevada Resorts Association is happy to support the bill as amended by Senator Brooks.

SENATOR HARDY MOVED TO AMEND AND DO PASS AS AMENDED
S.B. 358.

SENATOR SPEARMAN SECONDED THE MOTION.

SENATOR SETTELMAYER:

I want to thank the sponsor of the bill for working on the problems that came about. I appreciate you looking toward their concerns and trying to adjust.

THE MOTION CARRIED UNANIMOUSLY.

* * * * *

We will close the work session on S.B. 358. We will reopen the hearing on S.B. 395.

MR. FALK:

The next part of the bill deals with abandoned vehicles. This is a problem across the State. Right now if a retail operation or a residential complex finds a vehicle that is deemed to be abandoned, they would call a tow company to remove it.

Abandoned vehicles is increasing due to economic trends dealing with the crashing prices of scrap metal, tariffs from China and general economic growth. It is becoming difficult for the tow operators to recoup their costs by recycling these vehicles which had been the case in years past. In effect, by tow operators taking these vehicles, they are taking an immediate loss. There are no requirements in law that they have to take these vehicles, it is up to the operator's discretion. They are only required to take vehicles that are in the public right-of-way and directed by law enforcement to remove those vehicles.

Tow operators are not removing these vehicles. Property owners are being cited by code enforcement that the vehicle is deemed a nuisance or an abatement. They are facing fines to be levied against them from municipalities. They say to tow operators, "well we would like to pay at least some of the cost to get the vehicle removed." That makes sense to mitigate it instead of accruing fines over time.

However, the letter of the law as it is written and interpreted by the Nevada Transportation Authority (NTA) has precluded that from happening. The statute states that all the costs must be borne by the registered owner of the vehicle. In their interpretation, that precludes private property owners from reaching a mutually agreeable transaction.

What this bill does on that part is allow for that private transaction to occur if the tow operator reasonably believes they will not be able to recoup the cost.

In northern Nevada, there is a surge of motorhomes relative to Burning Man. People purchase a motorhome, use it for the activity and then abandon it rather

than try to sell it. In the case of motorhomes, you are talking a cost of well over \$1,000 just to dispose of that motor vehicle. They are required to remove human waste and to drain all the fluids that are in the vehicle. All of that adds up to a lot of costs. What we are asking is to allow that private transaction to occur.

There is one other section I need to point out. In section 4, subsection 2, this is to simply eliminate redundant reporting requirements that are within statute. The law requires any person who requests a tow to notify law enforcement of the time it was removed and where it went. Tow operators are required to notify law enforcement under statute and Nevada Administrative Code.

From our conversations with the property owners they rarely ever call the police. They assume the tow operators are doing that. In our opinion that seems redundant, so we are hoping for clarity to strike it within the statute.

DREW RIBAR (A and A Towing, Tow Operators of Northern Nevada):

Tow operators die while assisting vehicles that are broken down or have been in a crash on the roadways. It is a huge problem. The rate of death is incredibly high compared to most other professions in the Country. We appreciate this bill and hope you pass it to try to save lives.

Senator Denis mentioned Walmart; quick story. There was a red BMW stripped down in a Walmart parking lot. Walmart offered me money to remove it. I could not remove it. The scrap was worth nothing, maybe \$50. It would cost me a lot more than \$50 to process and recycle the vehicle. In the end the City of Reno did an abatement. It cost Walmart a lot more money than it should have if they had been able to pay me enough money to remove it and recycle it.

We are trying to solve a problem to remove blight from our communities and I do not believe it is just a northern Nevada problem. I am the only tow operator who operates in the north and in Las Vegas. From an article I read, I know the City of Henderson has formed a special task force to deal with abandoned vehicles. This solution should help in the north and south.

It creates a competitive field. I could charge a property owner more to remove junk than Mr. Baumbach of Milne Towing Services does. He can charge less or I can charge less to remove the vehicle. It creates a competition, makes it fair to

the consumer. It lets people clean up their properties and removes blight from our communities.

MICHAEL BAUMBACH (Milne Towing Services):

I support the sections contained in S.B. 395. To touch briefly on each section. Section 3, subsection 1, paragraph (b), talks about the blue lights on the tow trucks. Tow trucks are the only first responders that do not have blue lights. They respond to roadside incidents to assist people who are unfamiliar with the dangers the roads present. Adding the blue lights gives tow truck operators and the people who they are helping on the side of a roadway a fighting chance to be seen by the motoring public to advert a crash.

The second part in section 4, subsection 2, I want to add to what Mr. Tyson stated. The police agencies are already understaffed. Having to answer the phone for a duplicate phone call does not help the situation. I know that the Department of Public Safety, Nevada Highway Patrol is installing auto return for phone calls. This will work efficiently for their dispatchers. This change will be beneficial to any law enforcement agency and make the operational requirements efficient.

Again to section 4, subsection 4, for the abandoned vehicle disposal charge, motorhomes are extremely expensive to get rid of. In the north we see them more than the south because of Burning Man. Unfortunately, it is hard to figure out the last registered owner of those vehicles. As a towing company, if I accept a motorhome and get rid of it, I have to follow a lot of environmental laws and precautions to do it correctly. If I cannot recoup my cost at an auction or any other method, I am no longer going to accept these types of vehicles.

This creates an impossible situation for a landlord trying to clean up their property. There is no way for property owners to get rid of a vehicle through a towing company or the towing company refuses to impound the vehicle. The property owner cannot maintain compliance with environmental regulations and the safety they need.

We have seen these vehicles and motorhomes when those sit too long on property. Those become stripped, taken apart, may have two wheels or none, may be leaking fluids and it is problematic. This is in the best interest of the private property owner to have a method in which to get rid of these abandoned vehicles and motorhomes.

DYLAN SHAVER (Director of Policy and Strategy, Office of the City Manager, City of Reno):

Abandoned vehicles are not just a blight issue in the City of Reno and across the State, but they become a public safety hazard. Landlords and others will push them into rights-of-way. They become a hazard for our officers and the environment. The City of Reno is in support and hopes your Committee will find a way to pass this measure.

JOSE NORENA (Big Valley Towing):

I want to touch on the first part of the bill about the blue lights. This year has been fatal for the towing industry as a whole. Every three days there is a "struck-by" accident involving a tow truck. About every six days it is fatal.

We are in a crisis mode right now and these lights would create additional notice to drivers to identify us better. We are in a precarious position due to the nature of towing, you have to be in the front of the vehicle to tow the vehicle. Not only is the vehicle we are towing blocking our lights, but it creates some depth perception.

If we can eliminate that by creating a beam that sends light further down the road it is going to warn the general public to slow down and move over to the other lane. That is what is needed in this industry, because we are being struck and killed. The instances are higher than law enforcement and higher than the fire departments and emergency medical services. This is a crisis mode and necessary for the tow industry in Nevada.

The second part of the bill is abandoned vehicles. Those are a problem. They create not only a public inconvenience but a sanitation problem. They create an economic problem because it brings down the neighborhood. Other states and surrounding areas have come up with this same solution to this problem and I believe we should be in the forefront.

CHUCK CALLAWAY (Police Director, Las Vegas Metropolitan Police Department):
Las Vegas Metropolitan Police Department is here in support of this bill.

TODD HARTLINE (Captain, Nevada Highway Patrol, Nevada Department of Public Safety):

Nevada Highway Patrol is here in support of the bill. You may be aware our Colonel was here testifying and was updating the respective Committees about

troopers who had been struck by vehicles on the roadside. One was in Reno and one was in Las Vegas. You have heard some compelling statistics that are happening nationwide and know it is happening here in Nevada as well. We are definitely in support of this bill.

From an operational standpoint, at times you get to a crash scene and it can be a vehicle which is separated by several hundred yards or a quarter mile from the other vehicle. There are times when the trooper is further up the road into the crash scene investigating. The tow truck might be back at the beginning of the scene.

Research shows that the motoring public has a visceral reaction to the blue lights and they will slow down. They will drive more safely in those environments. Not only is it safer for the tow operators, but it is safer for the officers who are up investigating the scene and not necessarily paying attention.

I know you will hear testimony to add blue lights to the FSP that is operated by NDOT. They provide a tremendous service to our motoring public. We would be in support of those vehicles receiving approval for the blue lights as well.

ROD SCHILLING (Assistant Chief, Traffic Operations Engineer, Nevada Department of Transportation):

In general, we support the concept of these modifications to the NRS. We believe there is value in allowing specific response vehicles the ability to display the blue lights when reacting to incidents within the roadway. There is an alarming increase in the number of responders struck since January 1 through February 25 this year. There have been 20 fatalities nationally.

We are in support and as Mr. Tyson talked about earlier, we will be working with the proponents on a friendly amendment to include the NDOT FSP vehicles.

SENATOR DENIS:

I do support the amendment to add NDOT FSP vehicles.

CHAIR CANCELA:

We will close the hearing on S.B. 395 and open the hearing on S.B. 396.

SENATE BILL 396: Revises provisions relating to certain licenses and cards issued by the Department of Motor Vehicles. (BDR 43-1041)

SENATOR DENIS:

I am here to present S.B. 396 which revises provisions governing the use of driver's licenses from another jurisdiction.

Nevada is home to many Puerto Ricans. According to data from the 2010 Census more than 20,000 Puerto Ricans live in Nevada. Many of these people have difficulty transferring their Puerto Rican driver's licenses in Nevada. Generally, transferring driver's licenses issued from another state is as easy as showing proof of identity, residency and successfully passing a vision test. However, the Department of Motor Vehicles (DMV) requires U.S. citizens moving to Nevada from Puerto Rico to provide a list of official documents, as well as retake a written and driving test.

According to the DMV, transferring a license from a U.S. Territory is essentially the same as getting a driver's license for the first time. The DMV uses a database to validate and authenticate the driver's license and moving violations against the driver's license. Information on licenses issued in U.S. Territories are not available in the database. Other states such as Connecticut and Florida are able to verify the validity of a license issued in Puerto Rico.

Nevada law requires a new resident obtain his or her driver's license and vehicle registration within 30 days of becoming a resident. A person from Puerto Rico may not be able to do this based on the DMV current requirements. As a reminder to the Committee, Puerto Ricans have been U.S. citizens for more than a century.

Section 1 of the bill defines for the purposes of chapter 483 of NRS the term "State" to mean a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands and any territory or insular possession subject to the jurisdiction of the United States. These provisions apply equally to each of those jurisdictions.

Section 2 through 5 makes conforming changes. Section 6 makes a conforming change to the provisions governing a motorcycle driver's license.

I talked with representatives of the DMV and there is an issue concerning REAL ID with insular. I am going to suggest we make a change, to include Guam, Northern Mariana Islands and American Samoa, rather than use insular. They do accept documents from those, but all other insular possessions do not have sufficient documents to qualify for REAL ID.

JOEY CRUZ:

I am a member of Make the Road Nevada and am currently attending the University of Nevada, Las Vegas (UNLV). I came to Las Vegas from Guam last year with my father in hopes to find better opportunities. I am in support of S.B. 396 because it will allow Americans to transfer their driver's license without unnecessary burden.

After emigrating from Guam last year, I found out my driver's license from Guam will not work in Nevada, and I would have to take every test all over again. This process is time-consuming, costly and above all unnecessary. Between asking family members for rides and using ride share apps, the cost of transportation is creating a real problem for my family and myself.

I am going through the process of obtaining my license and have scheduled an appointment to take the driving skills test next week, and dealing with midterm testing. I am here to support S.B. 396 because people coming from a different U.S. Territory should not have to deal with this issue, on top of the burden of starting a new life somewhere.

THEODORE NEDEDOG:

I am a member of Make the Road Nevada. I was born and raised in Guam, the largest of the Mariana Islands located in the middle of the Pacific Ocean. I moved to Las Vegas with my second child, Joey. He is attending UNLV in hopes of finding better opportunities for himself and our family.

I am in support of S.B. 396. In searching for better opportunities, I had to make changes to lifestyles and expectations. The Guam Department of Motor Vehicles follows federal guidelines in construction of roads and the laws that govern driving on those roads. Guam implements requirements for individuals to attend driving schools and obtain certificates to take the written test. You must obtain road hours prior to taking road examinations.

Guam recently updated the standards to comply with federal guidelines to receiving a REAL ID.

It is my gratitude that Nevada is taking steps in welcoming citizens of American territories like Guam, with the ability to start our new lives in Nevada.

MILAGROS LOZADA:

I am a member of Make the Road Nevada and have moved here from Puerto Rico. I came here after Hurricane Maria, because things in Puerto Rico were critical.

I did not imagine I would have to go through such a hard time to be able to move around, to find a job, to be able to drive a vehicle when I moved to Las Vegas. When I went to the DMV, there was no booklet in Spanish for us to study and try to take the tests all over again. I am 51 years old and it was hard for me to do this. I failed the exam three times.

I keep thinking, if Puerto Rico is an American Territory, why do I have to take all of these tests again? The roads in Puerto Rico are a lot smaller, and I got around driving just fine with my Puerto Rican driver's license. I am here to ask for help for this to change. Then the rest of the Puerto Rican people who come here do not have to go through what I had to.

MARIA-ISABEL ALVAREZ POLDRAÑ (Translated by Chair Cancela):

She is from Puerto Rico, and is a member of Make the Road Nevada and does not speak English.

She moved here after Hurricane Maria and underwent a series of difficulties. Not only was the language a barrier, but also because of the transportation issues she faced.

She went to the DMV to get materials to take the tests, but they did not have them in Spanish. She failed the test three times, she passed the fourth time. She still does not have a driver's license despite being an American citizen from Puerto Rico.

She would like for us to support this bill. The other people who are still suffering from Hurricane Maria and want to come to Las Vegas will not have to undergo the same difficulties that she did.

THOMAS MARTIN (Management Analyst III, Management Services and Programs, Department of Motor Vehicles):

The DMV is neutral on S.B. 396. The DMV wants to note that there were conflicts with the REAL ID Act to be compliant. The documents that DMV is allowed to accept as proof of name and date of birth on a driver's license or identification card had conflicts. However, with the amendments it has removed those concerns.

SENATOR DENIS:

We are trying to make things better for people who come here and are going through the process to get a driver's license. I urge your support.

CHAIR CANCELA:

We will close the hearing on S.B. 396. We will open the hearing on S.B. 420.

SENATE BILL 420: Revises provisions relating to renewable energy.
(BDR 58-679)

SENATOR JAMES OHRENSCHALL (Senatorial District No. 21):

I am here to present S.B. 420. I believe it has the potential to help in the development of renewable energy for our State in areas that are not close to power or the utility grid. It has the potential to move this kind of development forward.

This is an idea that Mr. DeLee and I have discussed and have looked at through the years. Mr. DeLee is an agriculturalist and a practicing attorney. He has a farm near Amargosa Valley which has renewable energy of which I believe is 110 megawatts (MW).

If the Committee considers it, S.B. 420 will help in potential developments of off-grid renewable energy communities.

MICHAEL DELEE:

The 110 MW is being built now, it is not existing there yet. The opportunity for this legislation is to clarify in statute that we can have off-grid renewable energy communities in Nevada. In the presentation, there are certain limitations that prevent that from happening that I will discuss later.

Today, I applaud the members of the Committee and others in the Legislature who have tried to push renewables forward over the different sessions. There is a lot of hurdles, but we keep trying. What you see here on page 1 of ([Exhibit E](#)) is the UNLV solar decathlon home. The solar decathlon did quite well at the competition in Colorado. We have been working with UNLV on some of these proposals. University of Nevada, Reno has their energy storage research.

You will see on some of the pages communities around different parts of the country and other parts of the world that are adopting off-grid community models for renewal energy. As you can see on page 2 of [Exhibit E](#), there has been quite a bit of progress, reaching 133 million people around the world.

Canada has a lot of places that have moved off-grid. There are a lot of places that do not reach the grid in Canada and there is a lot of progress with it. We are seeing in the National Conference of State Legislatures research, that some states are moving farther than others for shared renewables. We know we have a right to generate power on our own premises. Where it is unclear is how you are going to share that with your neighbor should you want to as part of a project.

The best analogy is community wells. Small communities share a well with a number of houses or buildings. That is in statute and has been for a long time. This is similar to community wells except it is community renewable energy. What you are doing is enabling people to do that, but they cannot do that in an off-grid setting.

Costs have come down for renewable energy generation. Storage is becoming a component of that and we are proud to have it featured here in Nevada's economy. In some places, it is actually less expensive so people can economically choose to be off-the-grid. Whether you choose to be off-the-grid by regulation is a problem for some states including Nevada.

Molly L. Zohn did a research article for the problems in California as mentioned on page 5 of [Exhibit E](#). Through their energy codes they allow you to be off-the-grid, but not through the building codes. They require a signature from the utility company stating you have properly connected to-the-grid. If you do not have that, you cannot get your building permit.

The sections of this bill deal with those issues. It makes it clear that you cannot tell someone that they have to be part of the grid to receive an occupancy permit or some other type of authorization. If it is going to be regulated, we encourage counties and cities to continue to regulate for public safety. We have some clarifications we would like to make as this bill moves forward.

There are a lot of people who have put energy and resources into designing off-grid communities. This one on page 6 of [Exhibit E](#) is in Spokane, Washington and was done by the college there. There are examples of this throughout the world, but not so much in the United States. I believe we should get this opportunity in Nevada and it should be experimented with in the rural areas. That is our focus for those counties of less than 100,000 residents. We can do this. These examples are out there.

The International Renewable Energy Agency is a consortia of 160 plus countries around the world. They are trying to move energy production to a sustainable future. These are the examples they are promoting and off-grid solutions are on the top of their list.

Page 7 of [Exhibit E](#) is the legislative trends throughout the Country for shared renewables. This is a couple of years old and it has not changed a lot. You can see that Nevada is not in the forefront. This would help us move to the forefront. There are some other bills being discussed that will help us get there, but this will get us there quickly because it is specifically shared and renewable.

The innovation that you are going to get from a small, off-grid renewable community is driven by necessity. You do not have the grid to fall back on. You have to think it through from the beginning. That is the best way to do it, learn by doing. We have people who want to do this, but they cannot because of the regulations in place now.

Page 9 of [Exhibit E](#) is actually a company in South Africa that produces these facilities. These are called mini-grids, which is not connected to another grid. It is actually better than what we have for our traditional grid. We do not have these companies producing these things, because we do not have a market due to the regulatory obstacles in Nevada.

Page 10 of [Exhibit E](#) is examples of items that are just south of Pahrump, Nevada. You can take the Mojave Desert, as it looks on this page, and turn it

into something quite nice and 100 percent off-grid. This is Doctor Stephen Andracki's property and he is a doctor in Pahrump, NV. You can see what he has done.

We would like to add a few more places to live here and make it into a full community. You cannot do that under the current regulatory framework.

To clarify what we need to do under the regulatory framework, first of all we want to state it is 18 premises, not just 18 people on the premises. Second, we want to invite county commissioners throughout the State and rural counties of 100,000 or less to regulate this specifically. We have spoken with the Nevada Rural Electric Association with this recommendation. We fully support their clarification. We think the model exists for it under NRS 704.6674 where the county regulates water and sewer systems. The model is there to regulate off-grid electricity at the county level.

SENATOR DENIS:

What do they do to plan for when they cannot produce enough power since they are off-the-grid? What kind of backup systems or storage do they have?

MR. DELEE:

Each of these communities that we saw examples, have thought through that process. They are working with their engineers to figure out the solar installation rate and more importantly with the amount of cloud cover how much storage it would require. Whether it is electrical storage or thermal storage that is a process that is adopted in each one of these communities.

We have a wealth of knowledge already. For example, the Community Environmental Monitoring Program has stations throughout Nevada where it has gathered 30 plus years of by the minute history of cloud cover. That information is available for planning purposes. We have those resources available in our academic institutions to provide the engineering.

County building codes and safety standards are already out there. This does not address that. You have to get that for your building permits already. It enables you to adopt some of those proposals like those made by the International Renewable Energy Agency. There is no set solution of the standard that you have to follow when you are doing an off-grid community project. We do not have it.

SENATOR BROOKS:

Where did the numbers come from for the counties of less than 100,000 and 18 premises?

MR. DELEE:

First the counties of less than 100,000, we are trying not to detract from the grid. We are trying to go to areas where we do not have grid resources as well-developed. There are a lot of properties that are presently off-the-grid and for which it would be expensive to bring the grid. The counties of 100,000, that leaves most of the expanse of the State, but very little population. For example, in Nye County my clients would like to build this on property they have that is not necessarily in range of the grid. They cannot share those resources. Right now what they have to do is single structure, single supply, single storage with no opportunity to share.

That is the way the regulations stand. If we keep it in an area that is rural, it hopefully will not upset anyone. We decided on the number 18, because we used the community wells model. If you go over 15 hookups in the community wells model you now become a water company. When we put in over a certain number of wells, there are additional burdens. There is a lot of the Clean Water Act that you need to follow, the bureaucracy and the cost to hire attorneys to push it through, which makes it uneconomical.

There is a trade-off. We do not want to tell people you cannot share wells, because that would be foolish. There was this number out there and we thought the law has been in the books for a long time. With inflation, we thought that number would be 18 for these instead of 15.

SENATOR BROOKS:

Are you envisioning a model where the 18 homes are jointly owning that power system, like a community well model? Is that generally how most community wells work? Is that how this model works?

Are you instead envisioning it being like a company that owns this with some sort of subscription or unit cost, selling it to the 18 people? It sounds as if it could go either way in this bill. What are you envisioning in the development you are trying to achieve? I cannot understand it necessarily from the bill.

MR. DELEE:

In the documents presented ([Exhibit F](#)) from the International Renewable Energy Agency, they point out that there is no one size fits all solution for off-grid renewable energy projects. Trying to legislatively mandate it, might not be the best idea, because there are probably solutions that have not even been thought of. Just enabling it to take place at all would be great. But I think that both models do work and should be encouraged.

CHAIR CANCELA:

Where would an individual who is participating in this program go to seek a remedy if something goes wrong?

MR. DELEE:

First of all, there is probably oversight on several levels. If these are individual properties or separate parcels, it is almost certain that there is going to be a development agreement with the county. The county would be addressing these as part of such parceling or a subdivision program. If it is a breach of a development agreement, the county would be there to enforce the development agreement. If it is not part of the development agreement, I am sure there are contractual arrangements between the parties to undertake it.

Of course you have the backstop of litigation; I guess that is what we are there for. In the final analysis we do not want to invite it, but of course it is there. We want to make sure it is thought through from the beginning and it is properly licensed for people who are putting it in. To work with the electricity, have the proper license to do that or to get the building or occupancy permits, this changes none of that. It requires all of it just like it is in statute; it just states you do not have to connect the grid in order to do these things.

CHAIR CANCELA:

If there is a contractual agreement, it will solve that issue. However, in the event there is not a contractual agreement among the parties who participate and something goes wrong, where does that individual go to seek recourse?

MR. DELEE:

I would have trouble imagining how this could be done without some type of contractual agreement, especially if it is a residential environment. There would be a disclosure form for someone who is purchasing or renting as to what this is. Being as unique as it is, I think this would be in the forefront of everyone's

mind. It is different and they will probably be paying close attention to those questions.

SENATOR DENIS:

Does this prohibit a current neighborhood that might want to go off-the-grid from doing so?

MR. DELEE:

I do not see that there are any prohibitions in here other than if they were in a county that was over 100,000 population. We do not want to do this in larger counties. Maybe there should be a prohibition, and I do not have a problem with that. What we are trying to do is enable new things, not sponsor grid defection.

KYLE DAVIS (Nevada Conservation League):

The Nevada Conservation League is here in support of this bill. It is an innovative way to power more of our homes from solar energy. Obviously there are a lot of details to be worked out, but this is a project that deserves a chance to see if it can actually work.

CHRISTINE SAUNDERS (Progressive Leadership Alliance of Nevada):

The Progressive Leadership Alliance of Nevada wants to echo the Nevada Conservation League opinion. We believe this is an innovative idea to transition to more renewable growth.

PATRICK DONNELLY (Center for Biological Diversity):

We support this bill. Energy democratization is extremely important for transitioning to a renewable energy future. Ultimately, distributed generation is going to be one of the primary drivers for us to take power back, so to speak. This bill is a step in the right direction.

JUDY STOKEY (NV Energy):

I have spoken with the sponsor of this bill, as well as Mr. DeLee numerous times. I do have a few questions on who oversees this, what is the safety for the residents who will be living in these communities and reliability. We have a moratorium requirement with NV Energy for any of our customers when there is bad weather. We cannot turn certain people off and would not want anyone to be harmed by bad weather if something happens. We will continue to talk with the sponsor and Mr. DeLee.

I am glad that he showed the decathlon competition at UNLV. We have supported them and supported that program since day one.

CAROLYN TURNER (Nevada Rural Electric Association):

We are testifying in neutral today, not looking directly at the language, but because we have a lot of questions regarding the intent. We take pride in governance of our member associations or member groups as part of the associations.

We want to make sure that those same protections are afforded to other Nevadans. This is especially true in the rural communities that would want to self-generate. Clearly A.B. No. 405 of the 79th Session guarantees the right to self-generate and we are supportive. This is why each individual offers net metering programs. We would like to continue the conversation with the sponsor.

SENATOR OHRENSCHALL:

Thank you for hearing S.B. 420. It is not the kind of bill Mr. Davis thought it was. It is a bill that has great potential for trying to develop renewable energy in our less populated counties. I am willing to work with everyone to see if there is any fine-tuning to the bill to make sure if there is liability, that there is plenty of safety. I certainly intended all building codes to still apply.

CHAIR CANCELA:

We will close the hearing on S.B. 420. We will open the hearing on S.B. 496.

SENATE BILL 496: Revises provisions relating to limousines. (BDR 58-1086)

SENATOR DALLAS HARRIS (Senatorial District No. 11):

I am here to present S.B. 496 for your consideration. I will read from my written testimony ([Exhibit G](#)).

At this time, I would like to put forward a verbal conceptual amendment. It is regarding the provisions relating to operating with an agreement with the Transportation Network Company (TNC). Those were placed into law when we thought that the TNC would be allowing taxicabs and limousines on their platform. That is not the case. Section 1, subsection 1, paragraph (b), as well as section 1, subsection 6, paragraphs (a) and (b) are no longer needed.

I will continue reading from my testimony [Exhibit G](#).

NEAL TOMLINSON (Hyperion Advisors):

The transportation industry is in transition. Lots of changes have happened the last few years with transportation and those will continue to change. The practice of leasing taxicabs is relatively new.

The bill is important because it allows flexibility for both drivers and operators. I feel this flexibility will lead to increased utilization of the vehicles, which is what we want. It is not good for the vehicles when they are not being driven. This was a way to help make the transition of the transportation industry a little better.

MULUGETA ABRAHAM (Abraham Limo Vegas):

I started as a driver in 2012 with 1 vehicle. I started from scratch with no one's help. I now have over 50 vehicles in Las Vegas.

I am in support of this bill, because I was on the other side as a chauffeur. I think this will give flexibility to the drivers to choose if they want to do a charter business with us. It will also help if they want to come in on a Friday or Saturday night to assist us on a part-time basis. I think this would be good for the chauffeur and it will help out the industry as well.

BRENT CARSON:

I am here representing many limousine and bus companies here in Las Vegas; they were not able to appear here today. The companies I represent are AWG Ambassador, Western Limousine and Executive Limousine by and through Mr. James Jimmerson. All voice their support of S.B. 496.

I am also a part owner of Strip Limousine Services along with my wife. We are in support of the bill. It provides the flexibility not only for the owners but for the drivers. Whether or not they would be comfortable in being an independent contractor, it provides them flexibility for hours and to earn an additional income.

A certificated carrier must charge a specific tariff that is on file with the NTA and that is roughly \$50 an hour. If they are being paid minimum wage, \$10 to \$12 an hour, the financial upside for independent contractors operating this is endless.

MULUGETA BOUR (Stardust Transportation):

I am the owner of Stardust Transportation. This bill is important to give us flexibility for the drivers. Our drivers work five days a week for us. But not all of them want to work five days a week and do not want that many hours. Those drivers can make more money this way. At the same time, there are drivers who have family issues or health issues; they cannot come to work all of the time. I am in support of this bill.

CHRISTIAN SASTOQUE:

I am one of the limousine chauffeurs here in Las Vegas, Nevada. I think this is a good idea for all of us because it will give us flexibility to be with our family members and earn a bit of extra income. That will give us relief from stress and be able to concentrate more on our jobs. I have small children and this will give me more opportunity to support them in the future.

SENATOR HARRIS:

This is one of those rare occasions where we have the limousine companies and drivers both asking for the same form of relief.

CHAIR CANCELA:

We will close the hearing on S.B. 496 and open the hearing on S.B. 346.

[SENATE BILL 346](#): Revises provisions related to marijuana. (BDR 43-1065)

SENATOR HARRIS:

I would like to work from the proposed amendment ([Exhibit H](#)) because it makes some substantial changes.

The bill as originally drafted would have raised the driving under the influence (DUI) limit for medical marijuana patients from the current level of 2 to 100 nanograms per milliliter.

That has been revised in sections 3, 4 and 7 of the bill. It increases the limit of the amount of marijuana in a person's blood to 5 nanograms per milliliter. What I am looking at now is something similar to other states that are close to us, our neighboring states. Those have been doing this a little longer than we have. Nevada is trying to move in the right direction.

The other change is deleting section 18 of the bill. This would require the Nevada Commission on Minority Affairs to perform a disparity study relating to the marijuana industry. The original idea was the need to figure out a way to diversify this industry on multiple levels. There are those who are significantly impacted by our previous drug policies who are prevented from benefiting from our current drug policies. The new proposed amendment can get us closer to those goals.

Instead of just doing the study, we are going to create a certification for emerging small marijuana businesses. It is similar to the certification for local emerging small businesses in NRS 231.1402. It will require the Governor's Office of Economic Development (GOED) to create a center to provide support and advocacy to these small, emerging marijuana businesses. It is similar to the support and advocacy provided for small businesses by the Nevada Small Business Development Center of the Department of Business and Industry. We have the framework in place to try to support new emerging businesses. This idea is to support those in our new emerging industry.

In addition, there will be comprehensive demographic information on the ownership, management and workforce of all marijuana and medical marijuana establishments. This would be collected by the Department of Taxation. It would require licensing, registration certificates or any local business licenses, permits or other approval required to operate a marijuana or medical marijuana establishment information. We still need to collect this data. If we are going to make some kind of change, we need to know the current situation.

The Department of Taxation will be required to transmit the information gathered to the GOED. The GOED is required to perform an analysis on the information. This is to determine whether and to what extent disparities and unlawful discrimination exists within the marijuana industry.

There is one provision in the bill that I have not touched on. That would be to require a study on the connection between marijuana use and intoxication. None of us have any idea what that intoxication looks like. No other state has done that well. Nevada has the opportunity to be at the forefront of this issue. If our laws push it forward and we do not continue to ensure we have it right, then we risk falling behind.

AESHA GOINS (Green Bridge Consulting Group):

One of the issues that the City of Las Vegas and I have been having is bridging the gap of inequity and inequality. Creating a marijuana emerging small business certification program will offer a bridge for minorities into the industry as sustainable business owners. In addition to supporting the State's goal of eliminating or reducing the illicit market, the emerging business model currently requires: you need to submit a complete application to the Nevada Governor's Office of Economic Development, be a local business, be in existence, operational and operating for profit, maintain its principle place of business in Nevada, be in compliance with all applicable licensing and registration requirements, not be a subsidiary or parent company belonging to a group of firms that are owned or controlled by the same persons if, in aggregate, the group of firms does not qualify pursuant to program requirements, be qualified as either a Tier 1 or Tier 2 Local Emerging Small Business.

In this, Tier 1 is 20 employees and Tier 2 is 30 employees.

Cities such as Los Angeles are having a difficult time stabilizing their social equity programs because of lack of funding and business support programs. Nevada's Emerging Small Business Program could act as the model for other cities to ensure marijuana small business owners are offered support for success and sustainability.

I realize that a social equity program may not be the exact answer. There needs to be a program that provides some business structure. They will need to explain and the recipients have an understanding of the regulations. There needs to be some partnership for success. I believe the emerging business model will do that.

WILL ADLER (Scientists for Consumer Safety, Delta Nine Group):

I would like to state that in the last Legislative Session there was a DUI marijuana bill that came up with some limits for intoxication, metabolite and Delta-9-THC. This bill looks to equalize these numbers and make it 5 nanograms for each of those substances in the blood test.

Other states, Colorado and Washington, are taking their Delta 9 numbers and declaring that 5 nanograms is the limit for their blood tests, once our bill came out. In actuality they saw our numbers and picked a number themselves and it is at 5.

In reality, we do not have any data or study around marijuana sobriety in general. Much like alcohol, the more you use it the higher tolerance you have to it. You cannot say that one joint of marijuana or a fixed amount of marijuana is high or not high when driving a vehicle. It makes it quite difficult.

Section 19 of the bill might be the most important part, because Nevada could get on board with creating their own study mechanism. We could at least have a listed amount of what the right sobriety number should be. We could then develop a study with parameters. Timing wise, California has already funded a study and they should be wrapping that up in the next year. If it works out right, we might be able to reference their study and improve on what they found.

I believe a lot of states will start doing these studies across the Nation to figure out what that number is for marijuana sobriety. We are still in the early days of marijuana use and part of the evolution is to find out what that number is. It is not quite like blood alcohol where 0.08 is the norm across all states. This is still new and developing.

SENATOR HARRIS:

To the Committee, please keep in mind the existing 2 nanograms in law is the minimal detectable amount in the bloodstream. That is the best a test can do. Tests that pick up 2 nanograms often have a margin of error up to 2 nanograms. Whether some people like it or not, we made a decision as a State, to first have medical marijuana and second legalize it recreationally. With levels as low as 2 nanograms, we are essentially still criminalizing it, especially given we are a per se DUI jurisdiction.

CHAIR CANCELA:

I sit on the Governor's Cannabis Compliance Board and have the honor of chairing the "diversity in the industry" subcommittee from that board. I appreciate you bringing this forward because it is not only timely but necessary.

The other is the workforce development component. This will ensure we are opening the industry to people of all backgrounds. It will guarantee we have people in the pipeline who have been disproportionately affected by marijuana laws and ready to enter the industry.

The proposed amendment for the 5 nanograms, is that only for medical patients or is it across the board generally for all people?

SENATOR HARRIS:

That would be across the board.

MEGAN ORTIZ (American Civil Liberties Union of Nevada):

We support the idea that Senator Harris stated to study the correlation between marijuana use and marijuana intoxication. It is accurate that it is not well-known and is a substance which interacts with our biology differently than alcohol.

There was a study done in 1995 conducted by Johns Hopkins University School of Medicine. They found that the detection times for cannabinoids in the system varied from a half day to 36 hours from the low to the high dose. The study showed the low dose being 20 nanograms and the high dose being 100 nanograms. Tetrahydrocannabinol (THC) and its metabolites are fat soluble. Its detection is unique in the spectrum of illegal substances because it varies from person to person.

The threshold right now, as Senator Harris explained, is too low given the margin of error. Research shows that even high levels can register as much as a day and a half later in an individual's system. Raising the levels drives us to continue research on these changes to policies which affect all citizens and with everyone having the same advantage. We urge your support on this bill.

MR. CALLAWAY:

Last Session, A.B. No. 135 of the 79th Session had some students from Touro University come and based on their research stated urine was established as a means of testing for marijuana intoxication. It was put in statute last Legislative Session that it could only be blood and those adjustments were made.

The reason I bring this up is because we oppose just making it an arbitrary move to any number, whether it is 100 or 5, without doing solid research first. If we can determine there is a basis to move this, then I think it should be done on research and study.

As of this morning, and unless someone was killed on our roadways since 8:00 a.m., we have had 29 fatalities in Las Vegas Metro's jurisdiction since January 1 of this year. We are 6 months behind on toxicology when it comes to

fatal crashes. Last year we know for a fact we had 18 fatalities that involved marijuana and are still getting toxicology tests back from our crashes from last year.

Being impaired on our roadways is a dangerous thing. I understand that people are patients and need to use their medicine. However, like other medicines such as oxycodone, you have to know when you are using it at a level that impairs you. You should not be operating a motor vehicle.

CHAIR CANCELA:

The most useful data sets as we are studying this issue, whether through this bill or a Touro University study is the data from law enforcement that is essential. It tells us with the different levels of impairment just how severe crashes were. I ask that all law enforcement come here to share that data. Make sure you are active participants as we continue to discuss this.

MR. CALLAWAY:

I served on the Governor's Task Force on the regulation and taxation of marijuana and impaired driving and that was one of the issues we looked at. What has happened in states like Colorado that are a little ahead of us in this, is it is one-sided. You have the pro-marijuana people who say, "Cancer is cured, the sun is out and life is beautiful since we went to recreational." On the other side you have law enforcement entities like High Intensity Drug Trafficking Areas who say, "Oh the world is coming to an end and everyone is dying from this." We need a neutral third party that can actually collect real life data that is not tainted by either side and use that data to make educated decisions on this. That was a recommendation from the Task Force. I think that is important.

SENATOR BROOKS:

You mentioned the crashes, fatalities and marijuana being present in toxicology reports. When you do those reports, are you measuring the amount that is showing up from toxicology for that report? With the limited amount of data you have to make correlations, have you seen the correlation between severity of impairment and nanograms?

MR. CALLAWAY:

I do have that data but did not bring it with me today. I do have a chart of the 18 fatalities that we had with the different levels of impairment. I believe others here may have some of that information from their agencies today.

It is across the board. We are seeing people who are at the threshold rate which is the 2 nanograms and we have seen people with higher levels. I think the highest one I have seen on the chart was 23. When I talked to our lab people they said they have never seen 100 nanograms. Basically, if you went to 100 nanograms you would be saying anyone can drive impaired because we have never seen that amount.

CHAIR CANCELA:

Do you know the difference between marijuana related driving fatalities and alcohol related driving fatalities? If not, can you get that to us?

MR. CALLAWAY:

That is a huge issue and we have been trying to tackle it in the southern part of the State. The discussions on consumption lounges and the desire to have alcohol served in those facilities along with the consumption of marijuana, is challenging. Right now about 20 percent of our fatalities that involve alcohol also involve marijuana. There are people who are doing the "cocktail," mixing these substances and driving.

COREY SOLFERINO (Lieutenant, Administrative Bureau, Washoe County Sheriff's Office):

The Washoe County Sheriff's Office is here in opposition to S.B. 346, but wants to take the opportunity to thank Senator Harris for listening to our concerns and we support her passion for this endeavor. We agree with respect to the Interim study because we do need to see what these effects are. I did bring some data.

In Washoe County what we have tried since the legalization of medical and recreational marijuana is be involved in our community from a Sheriff's Office perspective. We are arranging town hall meetings, going to our community advisory boards and doing education as a huge component of this because we want people educated. We are concerned about the effects of public safety and impaired driving. We want to make sure to keep it out of the hands of our underage youth.

We had the opportunity to support Assembly Concurrent Resolution (A.C.R.) 7 in the Assembly Legislative Operations and Elections for the Interim study of issues relating to driving under the influence of marijuana last week. At that

point we offered to send data from the Washoe County Sherriff's Office Forensic Sciences to support those efforts.

ASSEMBLY CONCURRENT RESOLUTION 7: Directs the Legislative Commission to appoint a committee to conduct an interim study of issues relating to driving under the influence of marijuana. (BDR R-758)

Arbitrarily changing the number is somewhat irresponsible on our part before we know about the impairment. Our Criminalist II, Dan McDonald, gave me some data from the last 11 years. We have had 7,500 samples that were tested for THC extracts. Out of those 7,500 samples we were only able to register 5 samples that were over the 100 nanograms threshold. The average sample of 16 to 17 nanograms was over 9, the average from 15 to 16 nanograms was 10 and the averages in the 13 to 14 and 14 to 15 were all over 8. We do not have that empirical data that indicates that level of impairment.

We have decades of research from the National Highway Traffic Safety Administration regarding how alcohol metabolizes in the body based on sex and on weight and how we can measure those alcohol levels. We want to make sure we participate in the discussions and are a part of that commission to study the effects of the impaired driving. We want to ensure we are making a responsible choice for Nevada.

ERIC SPRATLEY (Nevada Sheriffs' and Chiefs' Association):

We are here in opposition to S.B. 346. We are in support of section 19 of the bill as we need to get a factual number regarding the level of intoxication for a person who lawfully engages in the use of marijuana. This bill and the amendment proposes to arbitrarily move the number without any justification other than the hope of moving in the right direction. We do not know scientifically what that correct number is. We simply cannot agree to move the number to 3 or 5 nanograms or even the 98 nanograms that were originally proposed. It would be irresponsible and a public safety risk to do so without some justification.

JOHN T. JONES (Nevada District Attorneys Association):

We do support most in this bill, especially with the workforce development issues. However, along with the rest of law enforcement we do oppose any attempts to raise the per se nanogram level without a study. We do support the study and look forward to participating in that.

ILLONA MAGER:

My son Steven was killed in a THC involved car crash. He was my only child. My husband and I were a part of four families that lobbied the drug per se law in 1999 that you are discussing today. We did that as a result of THC levels being thrown out of court and offenders being charged with involuntary manslaughter and put on probation. Those people were put on probation at a time when marijuana possession and use was illegal, and were allowed to walk out of court with no points against their driver's license.

With those victims who had lost children having to leave court, watching the person responsible for their child's death not being sentenced to any jail time or probation was painful. That is what precipitated that bill to begin with. I would hate to see Nevada jump forward to a 5 nanograms law without the needed research.

I am in contact with victims in Colorado. There is a movement there to lower the 5 nanograms law. What is happening and needs to be addressed, is anyone that blows a 0.08 alcohol content is not tested further for drug involvement. I believe there is another bill S.B. 23 by the Department of Public Safety, asking for permission to do this kind of testing. In order to get a true picture of what is happening on our roads now necessitates that kind of overall look at what is happening with DUI.

SENATE BILL 23: Revises provisions relating to testing of a driver for the presence of alcohol or controlled substances. (BDR 43-345)

GERARD MAGER:

As my wife stated, we lost our 17 year old son to a marijuana impaired driver. Marijuana is a psychoactive hallucinogenic drug. Any amount is going to affect a person's ability to drive. Any amount. If it did not, they would not use it. It makes them high, that is why they use it.

In 2017 there were 29 fatalities related to marijuana directly in Nevada. I do not know what all of the levels were, but 29 fatalities for Nevada cost the State \$4.3 million. You want to raise it to 5 nanograms, maybe you can double that number and you will be happy with it, I do not know. But it is the wrong thing to do.

The fact that some states have 5 nanograms, does not take away from the fact that at least 10 have a zero tolerance for marijuana and driving. In fact, 0.08 is too high for alcohol. Utah has lowered their blood alcohol content to 0.05. They are taking seriously safety on the roads.

If you want to have more fatalities, more broken families, more severely injured people, then raise the level, but every fiber of my being says do not do it. You are going to make the driver's license a license to kill. When you get the numbers, you will probably find that 2 nanograms is a good number. All the states that have zero levels have less fatalities than Nevada. I am opposed to any change to the current law unless we move to zero like many states have.

MATTHEW WALKER (Nevada Dispensary Association):

The Nevada Dispensary Association is neutral only because we have not had time to fully review the proposed amendment and formally take a position. I want to address section 4. The first step to addressing the inequities in the marketplace and inequities in enforcement for the disadvantaged communities is to know the problem. The data measurement is a great first step that not only captures the demographic makeup of employees and owners, but also the insular businesses which are looking to do business in this market.

LEA CARTWRIGHT (Nevada Chapter of the Associated General Contractors):

We initially signed in as opposed before we had a chance to look over the proposed amendment. I think the proposed amendment takes care of our main concerns. We still have some underlying concerns with arbitrarily raising the limit of the nanograms and would like a study to move forward. As we are looking at businesses and industries that are affected by marijuana use and the marijuana industry, keep in mind contractors are often working on federally funded projects. Marijuana is not allowed on any of those projects and the impact it would have as well.

SENATOR HARRIS:

I would like to say to Mr. and Mrs. Mager there is nothing worse than losing a child and I am so sorry. I cannot even begin to empathize with what that might be like, given I do not have children of my own. I truly appreciate them being here doing what they feel they need to do to make the world a better place.

I would like to ask Mr. Callaway to also include whether those numbers in the report were marijuana only or if those were mixed with some other kind of intoxicant in the report. I think that might inform the discussion on that issue.

As far as five being an arbitrary number, I agree and I disagree. Five is arbitrary in the fact that we have not studied this yet and we do not know what the right number is. It is not arbitrary in the sense that we are trying to come in line with what other states are doing that have been doing this longer. It is not a number out of the blue, it is tied to something.

We have heard a lot that we support a study. The study is in this bill I support the study too. I am simply not afraid to take a step in what everyone can agree is the right direction. The majority of the consensus has been that 2 nanograms is too low.

We do not need a study to know that 2 nanograms is not optimal. It is essentially a zero tolerance policy. If that is what the State would like to adopt, and if that is the public policy choice that we would like to make, that is okay. That is not the public policy choice that this State has made. We decided to legalize marijuana, we have given people medical marijuana cards. We put in place strict regulations to open up these businesses.

We have to make sure we are doing this in a responsible way. I do not know how many people here have received DUIs. I have not, but can speculate that they are not fun. If you get locked up for a day, if you miss your shift, you are fired. If you are found to have a DUI, you are fired from your job. You might have to get a SR22 form, which is a vehicle liability insurance document required by DMV for high-risk drivers.

We have to be sure that people are, in fact, intoxicated. I brought this forward because I have received emails regarding this issue. I have heard stories of those who were in a situation where they were involved in a crash. The crash may not have even been their fault. They were given a field test they failed, but felt they passed; I cannot verify these stories. Then their blood was drawn and they were guilty. They were a medical patient but it does not matter, they tested positive and that is it.

I think we can be more responsible, we can raise the nanograms a little bit and make sure we do the study and come back and ensure we have it right. As you

have heard, I have had many discussions with stakeholders as I tend to do. I tried to bring forward what I think would be the best policy.

CHAIR CANCELA:

With that, we will close the hearing on S.B. 346. We will open the hearing on S.B. 168.

SENATE BILL 168: Revises provisions relating to energy efficiency standards for buildings. (BDR 58-912)

SENATOR CHRIS BROOKS (Senatorial District No. 3):

Nevada State Law makes requirements for buildings to meet energy efficiency standards as outlined by the International Energy Conservation Code (IECC). Senate Bill 168 is a bill designed to address certain inequities in the IECC which disincentivize the use of renewable energy systems on new homes.

After the introduction of this bill, I received feedback from a variety of stakeholders. I will be addressing these comments with the proposed amendments ([Exhibit I](#)), rather than the original language of the bill.

The 2018 code of the IECC is what has been adopted throughout most of Nevada. The Governor's Office of Energy (GOE) adopted it verbatim and the local governments adopted it with various changes that differ by jurisdiction.

Under the 2018 code a new home can meet the requirements of the IECC in 1 of 3 ways. First by following the prescriptive path, second by following a performance path that allows some trade-offs for energy efficiency and third by following the energy rating index (ERI) path, which originally was designed for maximum flexibility.

The prescriptive path is used by the vast majority of builders. That path is unchanged under this bill. The performance path is largely used by production home builders. That path is unchanged under this bill. The ERI path is the subject of this bill.

The ERI path was first implemented by the 2015 version of the IECC and carried forward to the 2018 version. With two caveats the ERI path effectively lets a builder pick and choose what kind of energy efficiency measures it wants to use in the home. First the builder must meet minimum mandatory efficiency

requirements from the 2009 IECC and second, must meet or exceed a number contained in the ERI for the requisite climate zone.

A builder can use on-site renewables combined with efficiency equipment to meet or exceed the ERI requirement. You will hear more from the Solar Energy Industries Association and the builders associations on this subject. The abbreviated version is, when it comes to scores, ERI scores are like golf scores, the lower the score the more efficient the home.

Various measures qualify for points to get lower scores under the ERI. What is important, solar is a way to meet the ERI score. In other words, solar is treated as an efficiency measure under the ERI path. Second, the home still needs to meet certain mandatory minimum requirements, which is commonly referred to as the backstop.

This is to ensure that homes have at least certain minimum levels of insulation, windows, and so on. The backstop in the 2018 IECC is where the inequity lies that this bill is intended to address.

Under the 2018 version of the code, a non-solar home scoring under the performance path uses the 2009 version of the IECC as a backstop. For example, the 2009 version of the code requires R-38 attic insulation. However, the 2018 code provides that a solar home using the ERI path must use the 2015 version of the IECC as a backstop. The 2015 version of the code requires R-49 attic insulation.

A solar home using the ERI path needs to use more insulation than the exact same home without solar. The net result of this inequity is that builders are disincentivized to use solar as a tool to meet energy efficiency requirements. It is because the use of solar triggers a requirement for more insulation than non-solar homes. Of course this increases the cost of the home to the buyer, which exacerbates the already existing high home prices in Nevada. This is why to my knowledge builders do not use the ERI path.

The proposed amendment removes the disparate treatment of solar homes and backstops them to 2009 under the ERI path, just as the 2018 code does for non-solar homes.

The proposed amendment also lowers the ERI scores required in the 2018 IECC. It strengthens the energy code, providing more energy savings and ensures that the home's energy footprint is smaller with solar than without.

Finally, the proposed amendment includes a statement of legislative intent. It states that our State and local governments should not favor traditional efficiency measures to the detriment of renewable energy.

JOSH HICKS (Nevada Homebuilders Association):

We are here in support of this bill. It is a bill that is popular as an option with many of our members. The goals of this bill were from the homeowner's perspective with three primary goals.

The first is to provide greater renewable energy options to home buyers. As you may imagine, newer home buyers like to see green energy features in their homes. Solar panels on a home is a big selling point. It is something people like to see. This bill will go a long way with putting an even footing in the building codes for solar and non-solar homes.

Number two, what this bill will result in with new home construction is further reduction of the carbon footprint. We have put a letter on record where we put some modeling in from one of our members ([Exhibit J](#)). That modeling shows what it looks like with the difference between the codes. It shows to what a non-solar home can be built and a 2018 code home with greater insulation requirements.

If you look at the same kind of home in Las Vegas, it comes out to a \$6 a year difference between electricity and gas, going from the insulation under the 2009 code to the insulation under the 2018 code. It is consistent with what many of our members have seen. There is a period of diminishing returns. Traditional efficiency measures can reach just enough efficiency before you start looking at other ways to reduce the energy consumption in a home.

Putting solar panels on a home does significantly reduce the cost. In those same models, we see it in the hundreds of dollars per year. Many of those electricity reductions are on electricity usage. It is not tied to what you think of as traditional energy use; it is space heating and air cooling.

The proposed amendment decreases the ERI scores further than the existing code. The lower those codes, the greater the efficiencies acquired. We had heard some concerns from stakeholders that they thought those scores might need to be lower and we put that in too. That strengthens the code even further.

The third goal of this bill from the homeowner's perspective is to reduce costs. A piece there is insulation. For example, traditional efficiency measures are expensive and the cost goes up every year. Our members see it go up 20 to 35 percent per year. When it is mandated, some of the newer efficiency measures that go into homes can increase costs.

We should be looking at those diminished returns of efficiencies and be looking at other ways to save energy costs as well. The reduction of costs to the production of the home translates into reduction of costs with the sales price of the home as well. This bill incentivizes the use of renewable energy on new homes and it reduces carbon footprints.

We have tried to address everyone's concerns. The proposed amendment you are looking at is the fourth draft. We have gone back and forth with this and have been working with everyone. From the homeowner's perspective we remain committed with stakeholders to see if we can get somewhere with what this should look like.

JOSEPH H. CAIN (Solar Energies Industries Association):

We often have this conversation with groups of building code officials, engineers, consultants and technicians to a mind-numbing level of detail.

First I would like to say, Solar Energies Industries Association as an organization fully supports building energy efficiency measures. These include having a backstop of efficiency measures, insulation, window products and such in the building envelope. Years ago, we attained a level of comfort that we did not have decades ago for the homeowners.

As Mr. Hicks mentioned, one of the things we wish to do in this venue is restore a level playing field. Solar homes should not be penalized by being held to a higher standard for the building envelope than homes without solar. One thing that should be clear is that consumers know that homes with photovoltaic (PV) systems have lower energy bills, not higher energy bills.

There are small, incremental changes to the building efficiency measures, such as the difference between R38 and R49 attic insulation. It requires additional labor and materials. It is the same difference between R30 and R38 insulation. Those are small, incremental differences.

You were shown a study isolating one of those homes. It was \$6 savings per year compared to models that were done by the builders, which showed the saving with PV is not \$6 per year, it is \$833 per year. That one is in the document that the Nevada Homebuilders Association submitted.

We are encouraging full integration of building energy efficiency measures and renewable energy in the code, rather than prioritize small incremental changes that are approaching diminishing returns. This will become attractive to builders so you will get more solar with original construction. It saves additional money rather than have it be an afterthought.

To relate all of this, if you think of a pie chart of all the energy end uses in a home, there are three that we call regulated loads. Those are space heating, water heating and space cooling, which is air conditioning. We have been working on those for decades. They have been reduced quite a lot.

Unregulated loads include appliance loads, lighting loads and plug loads. You might think about all of the things that are plugged in at your homes. Those dominate that energy pie.

When we talk about these envelope measures, we are only talking about two slices of the pie, space heating and space cooling. Although those could be improved, they have no influence over the remainder, which is over 50 percent of the total story.

We are trying to address the whole problem by getting PV in with the original construction rather than looking at things from this narrow lens. The examples we have here show differences. We want to get the full introgression of everything, get the PV attractive to builders and move forward.

DON TATRO (Executive Director, Builders Association of Northern Nevada):
To go through the process, we started this at the local level. When this came to me I was wondering why are we treating solar homes different than homes with

no solar? I thought this was an easy one. I was wrong about it being easy, but I still think it is right.

We worked with our local jurisdictions during the code development process and they suggested at that time that this would be better heard at the State level.

Following that, we brought it here and we have had multiple revisions, talked to every stakeholder and been sensitive to a lot of their concerns. I saw another draft of a potential change today that could work too. It was brought to us by a local county. We have been open to this process. I still think that the code process chose the antiquated way of insulation to bring efficiencies.

We would like to support renewable and see what that can bring us. A big part of this is the cost of insulation and the diminishing return as you ratchet up those levels of insulation. We are no longer seeing the efficiencies, we are only seeing the cost increase.

In the State, for every \$1,000 a house goes up, 2,285 Nevada residents are priced out of a mortgage, with 251 of those in Washoe County. If we are looking at someone who can afford solar and someone who cannot, it is important to keep those costs down.

We believe this is a good bill, it has our full support.

JESSICA FERRATO (Solar Energy Industries Association):

Mr. Cain has presented the technical portion of the bill and our support for it. I would also like to point you to a letter that was submitted for the record ([Exhibit K](#)).

JAMIE RODRIGUEZ (County Manager, Washoe County):

Unfortunately, we are here in opposition to the bill today. We support the intent of creating more solar and clean energy in our State and in Washoe County. Our opposition is to the proposed amendment and how it is drafted.

We have concerns of putting building codes in statute. This could create a scenario where we have to continue to come back multiple sessions to update that legislation to match building codes. I have met with Senator Brooks and the stakeholders. Hopefully there is something we can do to get it so we are not having to come back time and again for updates to statute.

TOM POLIKALAS (Southwest Energy Efficiency Project):

We are opposed to S.B. 168 for a variety of reasons. We find it would cost consumers money on their home energy bills, be detrimental to local economies and be counterproductive to Nevada's efforts to reduce greenhouse gas emissions. Now is not the time to roll back energy efficiency standards. No other state has adopted anything comparable to S.B. 168. In fact, the U.S. Department of Energy (DOE) is on record against rolling back energy efficiency standards.

Local governments and building departments have dealt with a concept proposal and it was addressed. They rejected these ideas as not being in the resident's best interest.

The GOE and utilities have already invested in extensive training programs to facilitate local code adoption, compliance and stable energy efficiency standards. It benefits consumers and helps us meet Nevada's clean energy goals. These include more rooftop solar which should be used in conjunction, but not replace cost-effective energy efficiency measures. That is the core of what the backstop should be and what energy efficiency levels actually are, cost-effective.

You have heard a lot of testimony that gets into the weeds. This is why we want to bring up the objection of key importance is that S.B. 168 removes local control over building energy codes. If nothing else, we should maintain and ensure that local governments have the ultimate decision on these complex issues. Local governments have knowledgeable and highly trained staff who know in detail the intricacies of building energy codes and the related issues. Let us trust these local building departments and local elected officials to determine what is best for their own communities. Let us not impose legislative restrictions that could impede their ability to save their citizens money and improve the environment.

I would like to use the City of Henderson as an example. In 2014, the Henderson Council adopted the 2012 IECC, which was the latest version of the code available. They were the first local government in Nevada to do so.

We have submitted a detailed report from the Pacific Northwest National Laboratory (PNNL) at the U.S. Department of Energy ([Exhibit L](#)). It states the

2012 IECC, or energy code, saves consumers money as compared to the 2009 and earlier codes.

The 2012 IECC uses energy efficiency measures that are cost-effective or pay for themselves over time. They did this study specifically for Nevada. The PNNL found that the 2012 IECC would save consumers an average of \$214 every year on energy codes as compared to the 2009 codes. In the amendment, this bill would prohibit anyone from going to a more efficient level.

With the 2012 IECC in place as our backstop, it will save consumers thousands of dollars over the lifetime of the home. Being an early adopter of the 2012 IECC, the City of Henderson helped its citizens to save energy, money and reduce greenhouse gas emissions. Henderson received a regional recognition award. It highlighted that Henderson saved their residents \$2.3 million in aggregate on utility bills since they put the 2012 IECC code in place. They also reduced greenhouse gas emissions by an estimated 30,000 metric tons. Since that time, virtually all other local governments have adopted the 2012 code or beyond in the factor. We are now at the 2018 code in most jurisdictions.

Fundamentally, let us not go backward to 2009 and cost consumers money and add more greenhouse gas emissions to Nevada's environment. We ask you to reject S.B. 168 for those reasons.

CAMERON DYER (Western Resource Advocates):

Western Resource Advocates is here in opposition to S.B. 168. As stated, the decision between energy efficiency and rooftop solar should not be an either/or proposition, but should be an "and." Energy efficiency is always happening, it helps peak demand and benefits each customer year round.

One key component to reducing peak demand is that the aggregate effects on the grid is it reduces investing in infrastructure and saves all individuals money. This affects electrical, as well as gas customers.

Rooftop solar can have similar effects, but is affected when the sun is shining. As referenced by Mr. Polikalas, the DOE released a report stating they oppose weakening energy efficiency measures in exchange for integrating renewable, in the form of rooftop solar. I think Nevada should do the same and not open this door.

LES LAZARECK (Home Energy Connections):

I have been providing Home Energy Rating System services for new and existing homes and constructing science training around the world. I received my mechanical engineering degree focusing on renewable energy and design, and was a founding member of southern Nevada's chapter of the American Solar Energy Society, Solar NV. I have taught the 2012, 2015 and 2018 IECC energy codes across the State. I am a certified International Code Council (ICC) residential energy inspector plans examiner.

I live in a home that has been net zero electric for 11 years, and is now powering an electric car by energy from the sun. I love renewable energy; however, I oppose S.B. 168 and here is why.

Renewable energy is not the same as energy efficiency. Renewable is the pre-purchasing of electricity versus reducing energy consumption. Remember, energy codes represent the minimum, or the worst that a home can be built. If you were shopping for shoes, you would not look for the cheapest shoes that provide just enough support, cushion and durability.

Under the 2018 IECC we have heard there are 3 compliance paths: prescriptive, simulated performance and energy rating index, the ERI. Often the simulated performance path is cost-effective to meet because it allows tradeoffs. Those are with the building thermal envelopes, such as the ceiling, the walls and the insulation requirements. It means we can put less in the attic if we put better windows in or have better performing walls. I have run analyses for both climate zone 3 and 5 comparing the simulated to the ERI path. The simulated path meets compliance, often without solar at a lower cost and lower operating cost.

Most production builders in southern Nevada have been using the simulated performance path for years. They have been constructing walls since the early 2000s and installing windows that meet or exceed the 2015 thermal envelope requirements.

Much emphasis has been focused on the builder. Are we missing the occupant factor or the resiliency? Imagine not being able to heat your home in the winter or cool it in the summer because of a mechanical problem at home. It could be related to a utility outage or natural disaster. You would appreciate having a home that can maintain a comfortable indoor temperature for a longer period of time. You may live in a home that the temperature in the summer and the

winter varies by more than three or four degrees. Effective thermal envelopes with the right size and properly installed heating and cooling systems can make that a reality.

When it is time to replace your mechanical systems, your heating and cooling systems, more efficient homes require smaller equipment which costs less. At this time there is no approved residential energy modeling software that can produce compliance reports based on Nevada's current modified air changes per hour requirement. If the State approves additional changes to the energy code, someone will have to pay the costs to modify the energy software used, such as REM/Rate.

RON LYNN:

I have been involved in construction in the State for over 41 years. Most of that time I was in the regulatory position.

The IECC was debated on a national level by scientists, engineers, practitioners, material suppliers, industry groups, regulators, users and a myriad of individuals. Over the years, these entities have conducted research and analysis, debated the issues and eventually voted on the code as adopted by Nevada.

In NRS 701.220, it provides the State adequate flexibility for the evaluation of alternate and special conditions. The proposed amendment does not ensure any value for the citizens of the State. Existing energy code provides extensive provisions for alternate means and methods, including solar. In addition, all of the local and State adopted building codes provide for performance based design. This enables the regulatory bodies to keep pace with the state of the art in technology and engineering. That is one of the pluses of keeping it out of the legislative arena. This bill provides an artificial restriction which has potential intended and unintended consequences to the detriment of energy efficiency for our citizens.

If there is technical information that is not yet presented, I suggest that data be provided to local jurisdictions so a thorough analysis may take place. As an alternate, the equations with the limiting parameters be provided to a third party, such as the DOE or a nonprofit such as the ICC, the organizations that promulgated the IECC.

This bill requires the State to conduct this kind of analysis with existing limited resources, which is not the wisest use of our State funds. The DOE has significantly fewer technical practitioners than individual jurisdictions. While there is no question of their competence or integrity, we cannot expect the State to match the timeliness or efficiency of local authorities.

MR. SHAVER:

The City of Reno is in opposition to this measure for three primary reasons. The first, we have philosophical objections to what is happening here. We do not believe the Legislature is the place for the building code to be determined. We are nervous about a future where any potential builder, perhaps looking for a wider profit margin, would come here seeking amendments.

Two, it is an attempt to circumvent the local process already in place. These are things best determined in local communities by building officials. In fact, this exact proposal has been rejected by the northern Nevada code community for a reason. Those reasons are primarily practical. A solar panel is going to be operative eight to nine hours a day in northern Nevada.

Realistically speaking, we need energy efficiency models because they work with the home for the entire day. Thinking about solar energy in the future, even if we can get panels to 100 percent efficiency, we are still going to need to store that energy. That energy storage is going to come at either the expense of the homeowner or perhaps just dissipated back into the grid via NV Energy. It really accomplishes nothing with solar panels but to allow for the construction of a substandard home with a gadget on top.

The last or third concern is with the equitability in the way this will be applied. Of course we do not expect that it will be in the nicer neighborhoods of Reno where homebuilders are building the substandard products with solar panels. They are looking to do this in affordable housing neighborhoods, per their own remarks.

What is going to happen when these panels break down? The homeowner will be saddled with greater costs. They are not going to have the energy efficiency to backstop the loss of that utility.

We appreciate the desire of both the State and the sponsors to move toward renewable energy production and usage in the State. We share that goal as a municipality. However, this is not the correct approach to do so.

KATHY CLEWETT (City of Sparks):

I have met with Senator Brooks, yet I am here for the City of Sparks in opposition to S.B. 168. My Community Services Department is completely not opposed to solar energy. Using solar to help energy generation is a good global goal.

Our objection is that energy generation does not equal energy efficiency. Just because there is a solar panel on your roof which is creating power, does not mean your energy efficiency remains high underneath the roof.

Building codes should not be implemented at a State level. Building codes are much better placed at the local level where they meet often and can be responsive to national code changes.

DYLAN SULLIVAN (Senior Scientist, Natural Resources Defense Council):

While we appreciate the dialogue with the home builders and Senator Brooks, the Natural Resources Defense Council (NRDC) must oppose S.B. 168, including the conceptual amendment.

Building energy codes exist to correct a well-known market failure, what is called the split incentive problem. Without building energy codes there would be a race to the bottom on energy efficiency to the detriment of consumers.

Energy efficiency investments have great returns. It is never cheaper or easier to add more insulation or better windows in building systems than when the building is under construction. Notice that the same logic does not really apply to putting rooftop solar on the building. There could come a time where buildings are becoming so efficient that it is better for consumers to use onsite renewables. That way they could get that last increment of energy performance from energy efficiency. But we are just not there yet; energy efficiency is still cost-effective.

I submitted as an exhibit of a report ([Exhibit M](#)) that Philip Fairey from the Florida Solar Energy Center conducted for the NRDC. At the levels required in the flexible ERI path of the 2015 IECC, using solar instead of efficiency

measures to reach required levels degenerates cost-effectiveness. You can see that in the conclusions on page 12 of [Exhibit M](#).

The NRDC supports solar and we support efficiency. The time when it makes sense to substitute rooftop solar for long-term durable, efficient features of the building is not here yet. Because of this and other considerations raised by other opponents, I urge you to reject this bill.

MR. DAVIS:

We would like to thank Senator Brooks and Mr. Hicks for the multiple meetings we have had on this bill in trying to come to a solution. Unfortunately, we are just not able to get there. The reasons that we are opposed have been outlined by previous speakers. My colleague, Mr. Sullivan, outlined many of the main reasons we have concerns with this bill.

STEVE DUBIN (Rmax, Inc.):

Rmax has more than 40 years of experience as an innovator with building insulation solutions. As a result of the industry experience, we have knowledge regarding building code development. Rmax is a recent partner in building science research, including projects with the DOE and Home Innovation Research Labs.

This bill will directly harm our industry. Not just manufacturers like Rmax, but the other insulation contractors, distributors and their employees throughout the State. The bill would allow houses to be built with solar, but built cheaply with less energy efficiency than other homes.

A strong energy code with the flexibility of equally strong compliance paths will unleash the power of competition without picking winners or losers. This bill is not necessary, given the inherent flexibility of the code. It will weaken the energy conservation provisions of the IECC.

The 2018 IECC for residential construction provides flexibility with numerous compliance paths. These include an energy rating index path, a performance path and a prescriptive path. The prescriptive path provides alternative approaches to minimum R-value insulation requirements, maximum assembly U-factor insulation for window requirements and area weighted U-factor methods.

A builder can benefit from this flexibility to find a low-cost path to achieving code compliance. These options are internally balanced. Weakening one path, as the bill seeks to do, will create a loophole in the energy code that defeats the purpose of a minimum standard. It may deceive citizens and residents about the energy, air quality, moisture control and general performance of their homes.

As an insulation manufacturer, Rmax is all for solar. We think it is a great option to increase energy efficiency. But we do not think it should be looked at as an either/or option to insulation. When properly and consistently maintained, solar is great. When installing and using insulation properly, it is a fantastic energy saver without the need for constant and consistent maintenance over the life of a home.

JERRY STUEVE (Director, Building and Fire Code Official for Clark County):
Clark County Building and Fire Code opposes this bill in its original form. I am not sure I am looking at the correct amendment because we do not have a copy here in Las Vegas. If it is the one with the Energy Index Ratings in section 2 specified, we are also opposed to that as well.

As a building code official, legislating the technical aspects of the code takes the ability for us to actually do our jobs. It limits us to approving alternates, it locks in values that cannot adjust to changes as flexibly as the code can. We fully support the bill's intent to increase the use of solar energy or renewable energy. We also support the intent of the equity in the construction for those who are using renewable energy and those who are not.

DAVID BOBZIEN (Director, Governor's Office of Energy):
We are here to offer neutral testimony, but with some concerns to be flagged for the Committee. We want to mention the GOE has a fiscal note on this.

First, we appreciate the idea behind the bill and the proponents of the bill working with us to address our concerns related to the fiscal note. In reviewing the amendment, it is not clear to us whether or not the fiscal note would totally be removed if the Committee chooses to process this bill. With the proposed amendment, it is fair to say it would be reduced.

Second, as a new member of the United States Climate Alliance, the Governor is committed to implementing policies that meet greenhouse gas reduction goals and supporting energy efficiency standards. Part of our collaboration with other

states in the Alliance is a great focus on IECC. The Alliance looks at what states can do to support local jurisdictions as they continue down this path of modernization of IECC.

Our office is in conversations with the National Association of State Energy Offices about the possibility of a DOE funded study in Nevada and Colorado. It would be a look back on IECC code option processes to date and look ahead at what can be done to improve the codes and the training around those. If anything, I know complex bills like this end up in studies. I can be sure this issue will be part of our study and work over the next two years.

We also submitted the DOE letter for the record ([Exhibit N](#)). There is a section in it titled Background, which gets to the evolution of the code. In 2015 is when the notion of solar and on-site generation was added. It was being compared with other energy efficiency measures. That version of the code is when you start doing these trades and calculations, it points to the fact that going back to 2009 is an erroneous concept. Solar was not part of the 2009 construct.

SENATOR BROOKS:

It was not the intention of myself and the others I was working with on this bill to diminish the codes we have or to make less efficient buildings. Our intention is to have fair treatment of on-site renewable energy with the codes that exist for the homes which have onsite renewable energy on them. There is nothing in the bill that proposes anyone could or should build anything less than the existing energy efficiency codes.

We just want the same treatment for solar homes as non-solar homes. I have learned about the passion people have for code. I am also sensitive to the local jurisdictions and their ability to be flexible when making and updating codes.

CHAIR CANCELA:

We will close the hearing on S.B. 168.

SENATOR SETTELMAYER MOVED TO AMEND AND DO PASS AS AMENDED S.B. 395.

SENATOR HAMMOND SECONDED THE MOTION.

THE MOTION CARRIED UNANIMOUSLY.

* * * * *

SENATOR SPEARMAN MOVED TO AMEND AND DO PASS AS
AMENDED S.B. 396.

SENATOR HAMMOND SECONDED THE MOTION.

THE MOTION CARRIED UNANIMOUSLY.

* * * * *

SENATOR HAMMOND MOVED TO AMEND AND DO PASS AS
AMENDED S.B. 496.

SENATOR SPEARMAN SECONDED THE MOTION.

THE MOTION CARRIED UNANIMOUSLY.

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CHAIR CANCELA:

There being no further business, the meeting is adjourned at 3:06 p.m.

RESPECTFULLY SUBMITTED:

Debbie Shope,
Committee Secretary

APPROVED BY:

Senator Yvanna D. Cancela, Chair

DATE: _____

EXHIBIT SUMMARY				
Bill	Exhibit / # of pages		Witness / Entity	Description
	A	1		Agenda
	B	12		Attendance Roster
S.B. 395	C	3	Tyson Falk / Tow Operators of Northern Nevada	Written Testimony
S.B. 358	D	24	Marjorie Paslov Thomas	Work Session Document
S.B. 420	E	10	Michael DeLee	Presentation
S.B. 420	F	20	Michael DeLee	Report from the International Renewable Energy Agency
S.B. 496	G	3	Senator Dallas Harris	Written Testimony
S.B. 346	H	1	Senator Dallas Harris	Proposed Amendment
S.B. 168	I	4	Senator Chris Brooks	Proposed Amendment
S.B. 168	J	6	Josh Hicks / Nevada Homebuilders Association	Letter of Support
S.B. 168	K	1	Jessica Ferrato / Solar Energy Industries Association	Letter of Support
S.B. 168	L	18	Tom Polikalas / Southwest Energy Efficiency Project	Report from Pacific Northwest National Laboratory
S.B. 168	M	44	Tom Polikalas / Southwest Energy Efficiency Project	Report from Florida Solar Energy Center
S.B. 168	N	3	David Bobzien / Governor's Office of Energy	Letter from the U.S. Department of Energy