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Transcriber's Office

Executive Board Committee  
March 08, 2016

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[LR455]

The Executive Board of the Legislative Council met at 12:00 noon on Tuesday, March 8, 2016, in Room 2102 of the State Capitol, Lincoln, Nebraska, for the purpose of conducting a public hearing on LR455. Senators present: Bob Krist, Chairperson; Dan Watermeier, Vice Chairperson; Kathy Campbell; Ernie Chambers; Galen Hadley; Dan Hughes; Tyson Larson; Heath Mello; and John Murante. Senators absent: Senator Coash.

SENATOR KRIST: (Recorder malfunction)...come up to testify. If you don't have 15 copies, let the page know. Brandon is our page today and he will make the copies, if necessary, that you'll need. Each witness appearing before us needs to fill out the testifier sheet, the green form. It's located outside the door. Please sign this form and hand it to the page when you come up here. Print legibly. When you come up, please make sure you state and spell your first and last name. That's for the transcribers so they can get it right. We are going to use the light system today, obviously, because we're trying to get this in over the lunch hour, and you'll be limited to three minutes. What I'd suggest to do is try to get what you need to say in three minutes and then, if there's questions, we'll get it from you. If you have written testimony, please just don't read your written testimony. Give us the highlights of what you have there and then give us the written testimony for the record. If you're not testifying and you want to be made part of the record, those sheets are also out there. So I will start by we'll introduce ourselves, starting over here to my left.

SENATOR HUGHES: Dan Hughes, Senator, District 44, ten counties in southwest Nebraska.

SENATOR KRIST: Senator Coash should be joining us shortly; Senator Murante should as well.

SENATOR CAMPBELL: Senator Kathy Campbell, District 25, Lincoln.

BETH DINNEEN: Beth Dinneen, committee clerk.

SENATOR KRIST: Bob Krist. I represent District 10 in Omaha...

JANICE SATRA: Janice Satra.

SENATOR KRIST: ...and Bennington. Sorry.

JANICE SATRA: (Laugh) Janice Satra, committee counsel.

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SENATOR WATERMEIER: Dan Watermeier, District 1, Syracuse.

SENATOR KRIST: Senator Chambers is on his way. Senator Hadley will be slightly late.

SENATOR LARSON: Tyson Larson, District 40.

SENATOR MELLO: Heath Mello, District 5, south Omaha.

SENATOR KRIST: So with that, the agenda calls for us today to hear LR455, Senator Haar, provide the Executive Board of the Legislative Council appoint a special committee to examine issues related to the impacts of climate change on the state of Nebraska. With that, Senator Haar, it's all yours. [LR455]

SENATOR HAAR: (Exhibits 1 and 2) Good. Senator Krist and members of the committee, thanks so much for hearing this. I will try and keep mine very brief too because we have so many people showing up. There are typically three reasons for the creation of a special committee as I'm asking you to do today and to pass to the body: one, it's a very serious issue; two, it crosses standing committee jurisdictions; and three, it creates a planning process for future legislative action. And LR455 meets all three of these. I've given you an outline of LR455 and I was going to go through that with you. But what I'd like to do real quickly is go through the exhibits I handed out to you and then give more chance for people to testify. The first one I gave you is from the U.S. Department of Defense just to show that one of the most engaged governmental agencies is the Department of Defense. They're taking climate change very seriously. And if you notice the last thing, it says they're already observing the impacts of climate change in shocks and stressors to vulnerable nations and communities, including in the United States, the Arctic, and so on. Then the second one is on the impact of climate change on human health, and we have Dr. Ali Khan, who is head of the Department of Public Health at UNMC, a former assistant to the United States Surgeon General, and he's going to talk about this. But just to let you know, Dr. Khan, I have that handout for you and I got that from him. We're very lucky they have a person like Dr. Khan at UNMC. The study really comes out of this book, and I have copies if anyone would like it, but this is the study that the university did called "Understanding and Assessing Climate Change Implications for Nebraska." The university then held what they called roundtables and this was inviting stakeholders. And if you look at this, the other thing I handed out to you, the study recognized all of these areas as things...parts of Nebraska's economy that would be affected. And then there were roundtables on some of these and that's what this booklet is about. And instead of going into any detail on this, I'll just leave this with you. But this is a report of the roundtables and, for example, the one on agriculture had people from agriculture who participated in the roundtable. And you'll see the reports of these groups. And they addressed the issues and what some of the things they think needed to be done to mitigate

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climate change in those areas. Then the third handout is the fact sheet that was produced by the university in conjunction with its book and, in particular, the (inaudible) projected change in Nebraska's climate. And this, again, is a report that was prepared based on the best climate information available and it was done by climatologists at the university. Nebraska has experienced an overall warming of one degree Fahrenheit since 1895. And the projected temperature change for Nebraska ranges from four to five degrees by the last quarter of this century if we do something about it, if we cut carbon emissions, or eight to nine degrees Fahrenheit by the end of this century if we do nothing. I noticed on today's news, for example, yesterday was a record. The average temperature is 49 degrees and we had 80 degrees yesterday--a new record. So, just imagining what Nebraska's future would be even eight to nine degrees, average, warmer. And again, I'm not going to spend any more time on that so we give people more time. The fourth handout is a letter from the Nebraska...or it's a summary of the Nebraska Rural Poll that's done every year. And in 2015, if you turn to page 2, you'll see that people were queried on climate change. And 61 percent of Nebraskans either agreed or strongly agreed, the rural Nebraskans either agreed or strongly agreed that Nebraska needs a climate action plan. So Nebraskans are expecting us to be leaders and to come up with a plan for climate change. Five, this is a Journal Star editorial: Nebraska needs to develop an action plan. Six is really interesting and what the NRD, the Papio-Missouri River NRD, did is they took the weather conditions from Ames, Iowa, in 2010, when they had the huge flood, and they projected what would happen if that same kind of rainfall happened in the Papio watershed. And on the back page of that you can see the estimated damage would be \$2.1 billion. This is one of the things that is being done in the way of planning for the future, taking climate change seriously in planning for the future. One of the important things about this committee is my staff, since I'm being termed out, will not sit in the office and read books this summer. They're going to be working on climate change. So there's no fiscal note connected with this study. With that, I would wait to ask if there are any questions, why don't you wait till closing because then we can hear from people who come to testify. [LR455]

SENATOR KRIST: Just for the record, all of that will be entered so it will be part of the permanent record. Thank you, Senator Haar. First proponent, person who supports. Welcome, Dr. Khan. [LR455]

ALI KHAN: Thank you, Senator Krist and members of the committee. I'm Dr. Ali Khan, A-l-i K-h-a-n. I'm dean of the College of Public Health at the University of Nebraska Medical Center and a former assistant surgeon general of the U.S. Public Health Service. I'm here this afternoon representing my personal views as a public health expert. The average global temperature has increased 1.8 degrees Fahrenheit since the late nineteenth century, which is largely driven by increased carbon dioxide and other man-made emissions in the atmosphere. According to NASA and NOAA, 2015 was the warmest year on record since 1880, continuing the trend for the warmest decade on record. Now the rising carbon dioxide concentrations result in higher

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temperature, changes in rainfall, increase in the frequency and intensity of extreme weather events, and rising sea levels. These changes will continue to have profound impacts on our health here in the state, in our nation, and worldwide. You have my testimony that lays out many of these impacts and you have the graph that has been submitted by Senator Haar. But let me go over a couple of highlights there. What we expect to see is increases in heat-related illnesses. We expect to see decreased air quality with the attendant effects on asthma and heart disease for people. We expect to see alterations in vector-borne diseases, an increase in water-related illness, impact on our food supply. And there's some emerging evidence that increasing temperature is associated with higher rates of personal violence and social disturbance, which negatively impacts mental health. So these are all...already been presented to you. Let me spend the bulk of my time with things that I have worked on over the last 20 years around climate change and what I've personally seen in my career at CDC and here at the University of Nebraska Medical Center. So some great examples of what we're already seeing has affected climate change, so not something that's going to happen at the end of the century but that has been happening over the last couple of decades is, for example, *Cryptococcus gattii*. This is a tropic and subtropical fungus that's causing disease in the Pacific Northwest. We see...we're seeing diseases from oysters in the Northwest that should not be infected with *Vibrio*. We're seeing an expansion of tick-borne encephalitis in Sweden where these ticks do not belong. We're seeing Lyme disease continue to increase here across the United States, so now almost 50 percent of counties have the appropriate tick vector. All the effects are not negative. So, for example, in Europe, they're reporting a decrease in a very severe illness of children called respiratory syncytial virus, and that season has gotten a lot shorter. What we do know about climate change is that, while all Nebraskans are at risk, some populations will be disproportionately vulnerable: children, pregnant women, etcetera. And this is an amazing resolution to really permit the Legislature to look at what the local effects of climate change would be here in Nebraska. Thank you, sir. [LR455]

SENATOR KRIST: Thank you, Dr. Khan. Any questions for Dr. Khan? Thank you so much for coming and testifying. [LR455]

ALI KHAN: Thank you. [LR455]

SENATOR KRIST: Next proponent. Welcome. [LR455]

DAVID CORBIN: (Exhibit 3) Thank you. My name is David Corbin, D-a-v-i-d C-o-r-b-i-n. Thanks for this opportunity to appear before you today. I am representing the Public Health Association of Nebraska. We support LR455. In public health we have something called "health in all policies." It's a movement that says when policy and law is being considered, the health consequences of policy or law should be given due consideration. LR455 addresses climate change influences on food, air, water, and soil, all of course which impact public health. PHAN

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is pleased to be one of the proposed...we are pleased that one of the proposed committee members would be the Chairperson of Health and Human Services Committee or their designee. I want to point out that many health organizations...our parent organization for Public Health Association of Nebraska is the American Public Health Association--one of the largest, if not the largest, public health organization in the world. We have a policy saying that we need to plan for climate change for all the reasons that you heard from the previous testimony. But I also want to point out that it's not just the American Public Health Association. The Lancet, which is one of the most prestigious medical journals in the world, published a report on climate change and health, and there are over 300 references in that that say we need to start planning now. The American Academy of Pediatrics has taken a stand and saying we need to plan for climate change and how it affects the health of children. The Canadian Public Health Association has also taken a stand with a report, and I should point out, as you've already heard about the UNL, UNL has given us a head start on what this committee could do. I was one of the, as many people were in here, one of the people who participated in the roundtables. So in short, we believe that this is a good resolution that will help us to plan for climate change as it relates to all aspects but especially public health. Thank you. [LR455]

SENATOR KRIST: Thank you, Dr. Corbin. And you gave us a letter from PHAN signed by yourself and Brandon Grimm. We'll make that part of the record as well. [LR455]

DAVID CORBIN: Yes. Thank you. [LR455]

SENATOR KRIST: Thank you. [LR455]

DAVID CORBIN: And the references are all on the back. [LR455]

SENATOR KRIST: Okay. Great. [LR455]

DAVID CORBIN: Thank you. [LR455]

SENATOR KRIST: Thank you. Next proponent. Welcome. [LR455]

BRONCHAE BROWN: Welcome. Thank you. My name is Bronchae Brown, first name spelled B-r-o-n-c-h-a-e and last the name is B-r-o-w-n. I thank you for this opportunity to add my comments to the conversation you're having about LR455 and global climate change. I've spent 20 years in the Marine Corps, planning and executing national security missions at the local, regional, and global levels. The United States Department of Defense, by design, is a conservative organization that strives to avoid changes that are a response to temporary fads or

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political whims. Many in the military come from the heartland and have common-sense values, like Nebraskans. I became aware of the Marine Corps' support and research in the causes and implications of global climate change in 2007, while working on my master's degree at the Naval Postgraduate School. The science is pretty clear. The global temperatures are increasing. This is not the first time in recorded history that the planet has warmed, but it's definitely occurring. As global temperatures rise, coastlines will change, population migration will occur, and there will be conflicts over limited resources as things get worse. There's much debate about the relationship between human activity and temperature rise. I urge you to avoid those debates because there are far too many variables to reach a definitive conclusion. The Unicameral should take the position that the Department of Defense did and evaluate what actions can be taken now to prepare Nebraska to be successful and thrive as temperatures continue to rise. For example, what the DOD did in 2007, the Marine Corps, investigating how they could reduce the amount of diesel fuel used in forward-operating bases in Iraq, they discovered a secondary benefit of this exploration that far outweighed the resources that were expended and the projected improvements. For example, by increasing energy efficiency for temporary buildings, the amount of diesel fuel necessary for heating and electricity generation was reduced. This reduction in diesel fuel consumption meant a reduction in the number of tanker trucks on dangerous highways, which reduced the number of trucks needed for convoys, reduced the number of security personnel for those convoys, reduced the amount of time searching for IEDs, and reduced the number of deaths that occurred during those convoys. I understand that Nebraska is not Iraq in 2007; but by supporting LR455 and creating a committee to explore climate change, you may be able to identify significant benefits from making changes that reduce carbon emissions. You may discover the unexpected benefits for farmers and ranchers using water in a more judicious manner. You may discover economic growth opportunities from fuel efficiency and public transportation, or you may uncover technology and research opportunities that benefit colleges and universities in Nebraska. Supporting LR455 is not a vote to support wild claims at the extreme end of the environmental movement but, rather, is a vote to encourage thoughtful exploration on how to position the state to thrive when the demand increases for limited natural resources. That concludes my testimony. [LR455]

SENATOR KRIST: Perfect three minutes. (Laughter) Any questions for Mr. Brown? Is that...the course you attended at the Naval Academy, is that a graduate program course of study? [LR455]

BRONCHAE BROWN: It was. It was a master's degree program in systems engineer. [LR455]

SENATOR KRIST: Good. Well, thank you for your service. [LR455]

BRONCHAE BROWN: Thank you. [LR455]

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SENATOR KRIST: Next proponent. Welcome. [LR455]

ART TANDERUP: Thank you. Mr. Krist and members of the Executive Board, my name is Art Tanderup, A-r-t T-a-n-d-e-r-u-p. I farm near Neligh, Nebraska. I would encourage you to support LR455. Climate change is real. We've ignored it too long. Now is the time for Nebraska to become proactive. The UNL report and the roundtables have recommended the creation of a climate action plan. I support this recommendation, and today I would like to address some of the potential impacts of climate change on agriculture. The UNL report indicates some key climate change data for Nebraska. And Senator Haar and others will get into some of this data. And I've included it in here but I'm going to skip over it. The data is pretty discouraging, especially for our children and grandchildren. And we see some young folks here today that are going to have a lot more to deal with than some of us who will be gone by then. The research has indicated that irrigation in Nebraska has helped keep the summers cooler and wetter because we irrigate so much. The before-mentioned changes will reduce the availability of water for irrigation. We had a taste of this during the summer of 2012. Farmers almost doubled their water consumption. The result was the aquifer dropped, in different places, 2 to 15 feet--significant reduction. In 2012 my nonirrigated corn averaged 10 bushels per acre; this year it was 127. My nonirrigated soybeans were 13 bushels an acre that year; this year they were 36. Average irrigated (corn) yield is 216 on my farm and average bean yield is 65 bushels. And during 2012, it was remarkable that we had more, you know, our average on our irrigated stayed about the same even though the outside suffered tremendously. So those are some serious things that we need to look at for groundwater. You know, and we've got to make practices...changes in practices for our crop and livestock management practices. And along with this we're going to see, you know, declines in crop and livestock production, increased stress due to weeds, diseases, insects, pests, and other climate-induced stresses. It will be crucial to reduce greenhouse gases as much as possible to mitigate as much future warming as possible. Every challenge has opportunities. We have an opportunity to invest in clean energy that will move us off fossil fuels. We can do research about crops and livestock that will adapt to the changes. We can educate our citizens about what they personally can do. As a concerned citizen, I've installed a solar system that generates 80 percent of my farm's electrical needs. We drive an electric car that we can charge off our solar panels. We use biofuels in our vehicles and equipment. I would love to see electric tractors and combines. Adaptation of other measures could help delay and reduce the impacts of climate change. You have the opportunity to lead. Please do. [LR455]

SENATOR KRIST: Thank you, Mr. Tanderup. Any questions? Thank you very much for coming. Next proponent. Welcome. [LR455]

STEVEN KRYGER: Hi. I'm Steven Kryger, S-t-e-v-e-n, Kryger, K-r-y-g-e-r, from Papillion. I'm a member of Nebraska Wildlife Federation but I'm appearing here only as an individual. This morning when I woke up I had no intentions of coming to testify. I didn't even know I was going

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to be in Lincoln. But I'm here in Lincoln for other reasons and I thought, you know, I might just testify. And I read an article, an editorial actually, which prompted me to think about this. It was if we had an asteroid that was 75 years away, mankind would take every attempt to divert that asteroid from hitting our Earth. It would become a nonpartisan issue. And if one country wasn't going to do its work, if China or India wasn't going to contribute to that, we would not say, well, they're not contributing so we're not either. Well, there would be no special interest. I don't think anybody would come out and say, well, this is a natural event. Asteroids have hit the Earth. This is natural. This is what we do. No, I don't think that would happen. Well, we do have an "asteroid" out there and it's climate change. And take those same examples: Why is there partisan issues on whether this climate change, this "asteroid," is going to hit this Earth? Those partisan lines should evaporate. And if one country isn't going to do its share, we...okay, fine. The same as the asteroid, we would try to prevent that asteroid from having an impact on this Earth, just like we should with climate change. And imagine if only 50 percent of the scientists said this asteroid is going to hit this Earth, we would act. Well, we have 90 percent of the scientists saying this climate change is going to happen. And probably 99 percent that say it's going to happen, maybe perhaps 90 (percent) are saying it's man-made. We should not bicker over whether it's man-made or natural. We have a responsibility to this Earth and we should...this resolution I think addresses the solutions and the causes...I mean the consequences of this and what are the remedies. That's what we should be focusing on, not so much the causes. The causes might be...come to light after we see what the solutions might be. This resolution puts that forth. And I just finished the book by Stephen Ambrose, Undaunted Courage, about Lewis and Clark. And Lewis and Clark and Jefferson, they were men of enlightenment age. They wanted to find out the facts: What happens in this northwest area? Well, this, in a way, this committee could be our corps of discovery finding out what the facts are. And it kind of reminds me, I date myself here, but the old movie Dragnet. You know, Sergeant Friday would say, he said, ma'am, nothing but the facts; we want the facts. I think this is what could come from this resolution and this committee. Thank you. [LR455]

SENATOR KRIST: Thanks, Ray (sic). Any questions? We've been joined, since we introduced, by Senator Murante and Senator Chambers. Next proponent. Welcome. [LR455]

AKSHAT SARAF: I'm Akshat Saraf, A-k-s-h-a-t first name, last name S-a-r-a-f. I'm a student at Lincoln Southwest High School and I'm a supporter of climate change because...I'm a supporter of climate change action because, well, it's a very important part of my life because I'm a researcher also at the University of Nebraska. I do research on carbon-based circuitry and also I'm currently in the process of making a pressure plate which will generate energy upon contact. So I'm the son of Indian immigrants to the U.S. and my father, he brought us here because of opportunities and economy of opportunities in research and opportunities in education. And now one of the biggest issues that is threatening the very existence of the entire world is climate change. And as a result, if you look at the...look at countries in the Third World, for example,

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Third World, people can't act because they don't know how to. And that's become sort of the stereotype among poor people, that they can't act because they don't know how to, while the stereotype among the rich people or more well-off people is that they don't act because they don't care. And quite frankly, I believe you can change both of those and creating a task force would be a very, very powerful method to change that. This would allow people to further spread education, physically be sharing education, which would spread awareness in climate change's consequences to both the rich...to both the wealthier and the less wealthy. And also, it breaks it down into something, what is called, a SMART goal--specific, measurable, assignable, realistic, and timely. Specific because it breaks climate action into parts, easier to digest and also metabolize among the public. It becomes measurable because resources that are used to act and the way they're allocated, that can be efficiently measured and, as a result, they can also measure the degree of impact. It will be assignable because task force targets records, assesses, and then addresses the given issues. It's realistic because the problem was brought on my humans and, as a result, we can work to get the problem out. And timely because the action will show results visible to everyone, both socially and economically. And there are different countries that have enacted certain policies: Germany, Holland, Scotland, and now more recently Japan and India, where I'm from. And also...so to invest in LR455, it's an investment in science. And, of course, to invest in science is to invest in humanity. [LR455]

SENATOR KRIST: Thank you very much. Any questions? Thank you for taking the time to come see us. Next proponent. You can't all be last, so just somebody jump up here. Hi. Welcome. [LR455]

KENNETH DEFFENBACHER: Hi. I'm Kenneth Deffenbacher, K-e-n-n-e-t-h D-e-f-f-e-n-b-a-c-h-e-r. I'm representing Nebraskans for Solar. It's a 501(c)(3) nonprofit, public benefit corporation in this state. We educate the public regarding solar and other renewable energies. We strongly support LR455 calling for the Executive Board to appoint a special committee to examine the impact of climate change on Nebraska and ways to mitigate its effects. As indicated earlier, the 2014 UNL report, follow-up stakeholder roundtables, and the 2015 Nebraska Rural Poll results all call for our state to develop a plan to help assess and address the impacts of climate change. One thing to help, though I follow the atmospheric science as closely as I can, I've come across one picturesque assessment of the long-term effects of climate change on Nebraska and it certainly helped to focus my mind. Within 50 years, much of Nebraska west of Lincoln will have come to resemble Arizona. At any event, greatly reduced snowpacks in Colorado and Wyoming over the long term would mean much less Platte River flow. And in the long run that could lead to, at the very least, severe water shortage and rationing in Lincoln and Omaha, since they both have wells along the west edge of the Platte, so drought. Furthermore, a drought and a warmer, lower Missouri River flow would mean seasonable shutdowns for our two nuclear plants, although that won't be a problem after about 2032, as I understand it, because they'll have been run out of their license and probably won't be renewed. But...and lest you think that sounded

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strange, some of their engineers agree. And, in fact, we might have come close in 2012. These particular seasonal shutdowns, because the water is too warm to cool the nuclear reactors sufficiently, and there has to be a sufficient flow, that would mean at least a seasonal shutdown. And lest you think that seems strange, such shutdowns already occurred in western Europe and in the state of Illinois, for example. So we would like to emphasize much greater use of solar and wind energy to generate electricity in our state would have the twin benefits of not producing carbon dioxide inducing...climate change inducing carbon dioxide, and it, further, wouldn't require the use of any of our valuable supply of water in the process, unlike the fossil fuels for electricity generation. And I've seen in other states where corporations such as Nestle's convinced people to let them mine local water resources and I worried a little bit about the attractiveness of that in the central part of the Sandhills. And that would have the effect of Nebraskans eventually, as agriculture and humans compete, not to mention electricity generators, compete for limited water, that would have the perverse effect of us having to pay for our own water and increase Nestle's profits, for example. So in any case, that is a whole summary of my feelings regarding climate change. [LR455]

SENATOR KRIST: Great. Thank you. Any questions? Seeing none, thank you very much. Next proponent. Welcome. [LR455]

JOE HIGGS: (Exhibit 4) My name is Joe Higgs, J-o-e H-i-g-g-s, and I'm here today representing Omaha Together One Community. OTOC is a coalition of 30 congregations and community organizations in the greater metropolitan Omaha area. I'll have to admit I don't know much...all that much about climate change, but I do know about people and I know what they care about. So I'm going to talk really with you about that. Two years ago OTOC had an issues conference where we bring forth issues that are surfacing in congregations and out of conversations. And because of those conversations, we had a workshop on climate change and 40 people came to it. We said we're not going to form an action team unless some people step forward to be part of it. And as a matter of fact, people stepped forward and that team of 20 to 30 people has met once or twice a month every month from then until now. And just last month, in February, we had another issues conference and we had to have two workshops on climate, one on climate and one on our local utility and how they're responding. People are concerned about this issue. They know something is going on and they want to know more about it and they want to know more about what is its potential impact on our state. I've worked in community organizing for 25 years and I've, frankly, never seen an issue that has engaged people and concerned people in the long term as much as this one. And we work on housing, we work on mental health, we work on a lot of issues. This has attracted a lot of people who are not environmentalists, they're not green. They're ordinary people from the pews who are concerned about what's going to happen to this state, what's going to happen to the world of their children. And I think they expect our state to try to figure out what do we do about it to kind of get ahead of this. They're not asking to enact any laws but they want you to study it. They want to figure out what are the options, what are the

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possibilities. So I think the ordinary person that we're hearing from says, we want you to do something to think about this at least. Senator Watermeier, I think this is a little bit like the resolution that you got through this committee a couple of weeks ago on mental health. We actually have a mental health team and we encourage senators from Omaha to support that because...it's like that because we all know there's a problem. We're not exactly sure what the dimensions of it are. We don't even know what the responses are. But we know there's a problem with the mental health system in our state. There's a lot of gaps. We also know there's a problem. You all took action, got that out, got it passed, it's now going to happen. That's the same thing we really want to have happen here. Originally, Father Dennis Hamm was supposed to speak today, which is the testimony you have. He is sick so I came, and now I'm improvising. I do want to read with you one short paragraph out of what he says. He says: The leaves of plants are the only life features on the planet that can turn the energy of the sun into a form accessible to us and to other animals. Everything is interconnected in a system whose source we call with a name like God. We didn't need Pope Francis to tell us these things, but his recent letter on the "Care of Our Common Home" came along just in time to help us read the urgency of our own age, when the cry of the Earth in climate change and the cry of the poor are together reminding us that we are one human family and that our mismanagement of the Earth is violating our environment but the unity of the human family. We have 500 people come to workshops about climate change and Laudato Si', the Pope's encyclical this fall. People are interested and we encourage you to move this forward. Thank you. [LR455]

SENATOR KRIST: Thank you. Any questions? Senator Chambers. [LR455]

SENATOR CHAMBERS: Which church are you from? [LR455]

JOE HIGGS: I belong to St. Benedict the Moor, which I think is in your district, 24th and Grant. [LR455]

SENATOR CHAMBERS: Uh-huh, somewhere in there. [LR455]

JOE HIGGS: Yeah. So... [LR455]

SENATOR CHAMBERS: What is my reputation in the community, if you know? [LR455]

JOE HIGGS: Oh, I think as a fighter. [LR455]

SENATOR KRIST: Take the Fifth. [LR455]

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JOE HIGGS: Okay. (Laughter) [LR455]

SENATOR CHAMBERS: Thank you. [LR455]

SENATOR KRIST: Please send my regards to Father Hamm. [LR455]

JOE HIGGS: I'll do that. [LR455]

SENATOR KRIST: He is doing great work. [LR455]

JOE HIGGS: He regrets that he came down ill. [LR455]

SENATOR KRIST: Yeah. Next proponent. [LR455]

LIZ VEAZEY: Hi. My name is Liz Veazey, L-i-z V-e-a-z-e-y. I'm here to represent myself, but I'm on the board of Energy Action Coalition, a national organization, and Mode Shift Omaha. I'm also a member of the Sierra Club, a number of other organizations. I've been concerned and working to address climate change for more than...for about 15 years, promoting renewable energy and energy efficiency across the United States, so I support LR455 and I think it's really important for Nebraska. I think we need to study and create a climate...a state climate action plan to be better able to plan for, address, and mitigate climate impacts in Nebraska, as the bill requests. Nebraska would join at least 34 other states with climate action plans. The state's current lack of action around climate makes it a less attractive state, I think especially for millennials. Our generation wants to live in forward-thinking states that are planning for the future. This bill gives Nebraska opportunity to plan how to best address climate change within the state, including increasing energy efficiency and renewable energy capacity, which will create more jobs in Nebraska. You can't outsource jobs in energy efficiency upgrades and renewable energy. And this gives opportunity for incentivizing lower carbon energy sources and attracting cutting edge jobs and millennials who want to be part of this new economy. Addressing emissions in transportation creates opportunities to support multimodal transportation, and especially millennials are interested in reducing their reliance on cars. So by increasing our investments in public transit, cycling, and pedestrian infrastructure, we can create more exciting urban environments that are more attractive to millennials and others as we are also decreasing our emissions. So addressing the impacts could strengthen our economy, keep more money in the state, help diversify and attract millennials and others to the state. So I think it's a great opportunity for Nebraska and we should do this. [LR455]

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SENATOR KRIST: Any questions? Thank you so much for coming down and testifying. Next proponent. Can I see a show of hands of those that still want to testify as proponents? One, two, three, four, five, six. How many in opposition? Okay. Go ahead. Thank you. [LR455]

JON TRAUDT: (Exhibit 5) Good morning, Senator Krist and fellow board members, committee members. My name is Jon Traudt, J-o-n T-r-a-u-d-t. I live in Omaha and I'm here to represent myself and family, children and grandchildren and both great-grandchildren. I retired as...when I...I used to lead the national certification program for wind systems. But for the last 30 years my company has been testing homes throughout the state and in Iowa. I've tested homes in north Omaha, in Regency, Scottsbluff, and so forth. And one thing that I see is there's a lot of opportunities to cut down on energy usage and that would cut down on the use of fuel, which would help to slow down the climate change. So the evidence I plan to provide--it's being handed out--may help to convince you to support LR455 even if you never (inaudible) mandate climate change. For one reason, there's a lot of things that can be done that are profitable. For instance, weatherization programs throughout this country have been saving electricity for less than 5 cents a kilowatt-hour, about half of what the utilities charge. Reducing the use of fuels would help to have a lot more fuel available as feedstock, because it's used to create fertilizer and plastics and chemicals. So there's a lot of reasons. Now to save your time, I've included an article from the World-Herald, very well written; news from J.P. Morgan that they are not going to invest in coal, and you'll see that one of the reasons is that a lot of coal that's in the ground will never ever be mined because it will take more money and more energy to get it out than you get out of it. So I've included evidence for you. The same thing holds true for oil and natural gas. We are, in truth, running out of it, so that makes...it makes sense to cut back on the use of fuel before we run out. Another reason to make homes more efficient is to make them tight, control ventilation, for one reason--Harvard University says that if we don't ventilate right it affects our mental capacity, makes us tired, makes it harder for us to use the information. I've got a lot of experience in this, going back to the '70s. One thing I did was research that resulted in winning an international prize on radon education. Now this also...this report shows that when you mitigate radon, you can also save energy and reduce exposure to a lot of other things. [LR455]

SENATOR KRIST: Mr. Traudt, could you wrap it up. We've got all the stuff in the folder. [LR455]

JON TRAUDT: I'm sorry. [LR455]

SENATOR KRIST: Just a final comment? [LR455]

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JON TRAUDT: So if you have any questions now or in the future, let me know. If you would like to see the benefits of a home energy audit, Senator Haar has seen it. And, well, thank you. [LR455]

SENATOR KRIST: Thank you very much. Any questions? Thank you, sir. Next proponent. Welcome. [LR455]

JOHN POLLACK: I'm John Pollack, J-o-h-n P-o-l-l-a-c-k. I'm a meteorologist. I spent 31 years as a forecaster with the National Weather Service in Omaha, so I'm quite familiar with Nebraska's weather and climate issues. Out of respect for your time, I'm going to summarize a few things here. By the way, I'm representing myself and nobody else. It's important to understand that the 2014 report, "Understanding and Assessing Climate Change," is a consensus report. This is the area where there is strong scientific agreement. What it doesn't tell you is the way we get from where we are now to the end of the century with the various intervening weather and climate events. That's because we don't have sufficient confidence to say, oh, there's going to be a big flood in 2068 or whatever. However, we do have confidence that we're going to be seeing more of these weather extremes as time goes on. And then when you do have an extreme, that people expect their state government to be there and do something. That's one of the reasons why I think this idea of a special committee is a very good one to try to keep up with things and to be able to be proactive to the extent possible. A second point, and Art Tanderup covered some of that earlier from the perspective of his farm, this is the middle of the Corn Belt. This is our bread and butter in this state. And we are in a fragile position when it comes to climate and water. One of the reasons we're optimum now is because we get lots of rain in the spring most years and then it starts to dry out in the summer as the heat dome moves north. That heat dome has been moving north earlier and faster. We're holding it back through irrigation, so it is actually the action of our irrigators that is modifying our climate now and making it more favorable for Nebraska. We're holding the Kansas and Oklahoma hot summers out of the area in part through our current activity. That's obviously endangered as time goes on. Finally, as legislators, when there is a drought, you are in one of the worst places because droughts are hell on politicians. You've got a dwindling resource, everybody wants it, it's precious, and you've got a mishmash of laws that tells different people, well, it's good to use it up or you lose your allocation. No, we want to conserve water, this is a drought, etcetera. So planning ahead, going through these laws and so forth will help you avoid future grief. Thank you. [LR455]

SENATOR KRIST: Thank you very much. Any questions for Mr. Pollack? Thanks for coming. Appreciate it. Next proponent. Welcome. [LR455]

JOHN ATKEISON: Thank you. My name is John Atkeison representing EnergyLinc. We're an educational organization at the grassroots on subjects of climate change, global warming. Thanks

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for hearing us here. The Unicameral, as you well know, initiated this report from UNL. It is state of the art, topnotch, and very, very valuable; gives us the basis for looking into the future with much clearer eyes. The report was released in September of 2014 and it references the recent memory of the summer of 2012, since that year is still pretty fresh in our minds. And there was a...there's a section that caught my eye early on talking about the increase in number of high-temperature stress days over 100 degrees and so forth. And they say that by mid century this increase for Nebraska would equate to experiencing typical summer temperatures equivalent to those experienced during the 2012 drought and heatwave. So typical summer will be like the 2012 summer, not every year, but it will...that will be the normal; that's...if it's cooler than that, we'll say it's a cool, cool summer. There will be summers more stressful than that, according to the folks who do the work and know what they're doing. So it also means for the next few decades we'll see more and more summers like 2012, and by mid century we will see not just one summer but three, five, eight years like that. And when you talk about this in rural Nebraska, as I have, that's when the room goes real quiet because that is tough to deal with. And, you know, people don't like to think about it but we need to think about it. What will it really be like? We can look to the Dust Bowl of the 1930s for a glimpse of what it might be like. And it's our responsibility to determine what comes next. After the '30s, the Dust Bowl era, things got better. Will that happen again? Not if we keep on doing what we're doing now. So we can think about in just a few decades normal weather being like Oklahoma in the Dust Bowl--not a pretty picture. And that's just the starting point. Now all of this assumes that we don't change anything, that we keep doing what we're doing now, we don't take steps to prevent the worst consequences of our previous inaction. What actually happens is up to us. There have been very powerful forces even trying to prevent public discussion of this. The oil companies, it turns out, have known about this and they came to these conclusions 30-40 years ago, and they don't want to give up what they're doing. But if we do cut greenhouse gas pollution, the effects can be much less severe. The biggest variable that affects our future is what we do. It's up to us and this is a good start, this LR455, and that's up to you. So thank you. [LR455]

SENATOR KRIST: Thank you. Any questions? Thank you for coming. Next proponent.  
[LR455]

ERIC WILLIAMS: Good afternoon, Senators. My name is Eric Williams, E-r-i-c W-i-l-l-i-a-m-s, from 909 North 49th Street, Omaha, Nebraska, 68132. I'm the president of Nebraskans for Solar and a citizen of Nebraska who's very passionate and interested in the consequences that will come from inaction to understand the problem and the future situation that will come from climate change. I'm traditionally trained as an engineer and climate change is essentially one giant engineering problem with many moving components. The first step in solving or overcoming any engineering or design challenge is to understand the problem. The UNL report does a good job of explaining the consequences and what will happen if we take no action, but the next step is that we need strong leadership, specifically from the Legislature at the statewide

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level, to know what direction we should choose to move forward so that we can both mitigate the consequences and understand what changes will be needed in our action in the future. As far as engineering solutions, we have technology today that can solve this problem without any additional advancement, although that will continue and will be additionally beneficial. In 2014 I installed about 3 kilowatts of solar on my own home, and in 2015 that produced 92 percent of the electricity that we needed in our home. To continue that to the next step, a couple months ago I got a Nissan LEAF, which is an electric vehicle, and that's now powered by the solar panels on our home. So the combination of solar panels with electric drive technology can drastically reduce the need for coal for electricity and petroleum for transportation. In fact, I took an experiment and carpooled here today with two other proponents of this resolution from Omaha just to demonstrate that electric vehicles can meet the transportation needs and that technology is available. If you look out the window, you can see it charging over at the Ferguson House at the ChargePoint charger that was installed with a grant a couple years ago, and so it will be ready to go and take us efficiently and cleanly back to Omaha at the end of this hearing. I would again point out that there is technology here today that can overcome these problems, but we don't have leadership and direction as to what technology we should implement and what solutions will be the best to reach our shared community goals across the state. Someone mentioned earlier that attracting young professionals and retaining businesses and talent in the state is important, and I mention, not to brag but just as a reference, that this year I was one of the ten Outstanding Young Omahans, and several other people in this room have won that award as well, and also on the Forty Under 40 business list. If you were to ask those people, I think you would find overwhelming support for action on climate change to help make Nebraska the type of environment that would encourage progressive and dedicated young professionals to start businesses and continue businesses in the state of Nebraska. So many of us will be around to see the consequences of action or inaction, and we encourage you to pass this resolution and take strong leadership towards making a future that Nebraskans can be proud of. Thank you. [LR455]

SENATOR KRIST: Thank you. Any questions? Thank you for coming. Next proponent. Welcome. [LR455]

CATHARINE CARNE: Thank you, Chairman and committee. My name is Kay Carne, C-a-r-n-e. I'm here speaking on behalf of myself and the organization I work for, Verdis Group. Verdis Group is a small sustainability firm who's worked with a number of large organizations in Nebraska. And I'll talk about who else is working on climate change here and talk about that second, but I wanted to make a comment on Eric's engineering problem. I was an accountant for a decade in New York before I moved back to Omaha, where I was raised, and before I got a master's degree in natural resources and the environment. This is also a large financial problem. It's going to take money to address the issue of climate change, but acting now is going to take a lot less money than acting a decade from now. Take, for example, LED bulbs. An LED bulb will

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pay for itself in a year and then the expenses of whatever home or organization that put that LED bulb in will have more money for every single year after that. So it's not only cost-effective to take certain actions; it's actually an economic benefit. So having everybody work together on this and having the Legislature involved and having some guidance from you all makes a lot of sense because there are a lot of people who are working on this issue. But to do it in the most economically and financially sound way, you need to have everyone working together. So I also wanted to talk about some of the organizations that we've worked with that are addressing sustainability, addressing their energy use. We've worked with OPS and helped Omaha Public Schools save over \$5 million in energy costs since 2009. We've worked with the Omaha Zoo, Nebraska Medicine, Kearney Public Schools, UNK, UNO. And UNO, the Med Center, and UNK are so concerned about climate change that they have set climate neutrality goals for 2050. So that means that all the energy--and these are aspirational goals, they are where they want to be-- but that means in 2050 all the energy that those organizations use will not be creating greenhouse gas emissions or they will have taken an action to offset the greenhouse gas emissions that they are creating. So people in our state are working on this issue. Separately from that, Creighton has set more than an aspirational goal. They have made a firm commitment to be climate neutral by 2050 and signed the American College and University Presidents Climate Commitment, as have College of Saint Mary, Central Community College in Grand Island, and Doane College in Crete. And some of the large organizations, Union Pacific, ConAgra, they report on their climate risk and climate commitments through their citizens' reports. So as many of the people in this room have said, climate is a huge issue. We want to try and address it together. Nebraska businesses are addressing it, nonprofits are addressing it, and we encourage you to undertake this study with LR455 to help as well. [LR455]

SENATOR KRIST: Thank you. Any questions? [LR455]

CATHARINE CARNE: Does anyone have any questions? [LR455]

SENATOR KRIST: Seeing none, thank you very much. Next proponent. Welcome. [LR455]

CHELSEA JOHNSON: Thank you. My name is Chelsea Johnson, C-h-e-l-s-e-a J-o-h-n-s-o-n, and I'm here representing the Nebraska League of Conservation Voters and I just want to add to today's testimony some of our experiences that we've had working with communities across the state on the issue of climate change. There are leaders in these communities who not only want to increase awareness and understanding of what climate change is and what it could mean for their communities but, most importantly, what they can do about it. Educating people about climate change can only go so far when it comes to actually helping them adapt and build resiliency to what negative impacts could happen in their area, as well as take advantage of economic opportunities that they could reap the benefits from in their area. So I just wanted to

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relay that there is a desire to have a plan set out that provides options for what communities can do to act on increasing their resiliency to climate change. So it's not just going to sit in a drawer. Thank you. [LR455]

SENATOR KRIST: You bet. Any questions? Seeing none, thank you very much. Did you draw the short straw? You're last, is that the case? [LR455]

JAMES CAVANAUGH: The last shall be first. [LR455]

SENATOR KRIST: Oh, no, we've got one more. We've got one more. Okay. Welcome. [LR455]

JAMES CAVANAUGH: Senator Krist, members of the committee, my name is James Cavanaugh. I'm an attorney and registered lobbyist for the Nebraska Sierra Club. I appear on their behalf here today in support of LR455. Founded in 1892, the Sierra Club is the oldest and most influential grass-roots environmental organization in the United States. Inspired by nature, we support making the best use of our natural resources, including protecting air, land, water, and developing clean energy to benefit both the economy and the environment. Obviously, LR455 is well in line with our goals and we look forward to working with this committee on implementing its provisions. We'd also like to invite you to attend an informational reception to be held here at the State Capitol before the session on the morning of Thursday, March 24, 2016. You'll be receiving individual invitations at your office. I'll be happy to answer any questions you might have. [LR455]

SENATOR KRIST: Any questions for Mr. Cavanaugh? Thank you very much. [LR455]

JAMES CAVANAUGH: Thank you. [LR455]

SENATOR KRIST: Next proponent. Welcome. [LR455]

KYRIA SPOONER: Thank you. My name is Kyria Spooner, first name K-y-r-i-a, last name S-p-o-o-n-e-r. I am part of a local grass-roots organization called Guardians of the Aquifer, but I am here representing myself just as a concerned citizen of Nebraska and a resident of Lincoln. I have read the "Implications for Nebraska" report that UNL did. I encourage all of you to read it if you are looking for a lot of really good facts about climate change and how that's going to impact Nebraskans. If you don't have the time to read through the entire report, I completely understand. (Laugh) I hardly have any time to read and I'm not a busy senator with paperwork thrust at me constantly. So what I kind of wanted to do is summarize what are these implications for Nebraska. There is going to be an increase in drought frequency and severity. The

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temperature is increasing. The frost-free season is shortening. Heavy precipitation events are increasing. The projected temperature increase with a low-emissions scenario by 2100 is 4 to 5 degrees Fahrenheit. Days over 100 degrees Fahrenheit are increasing. Day...nights over 70 degrees Fahrenheit are increasing. Soil moisture is decreasing. So all of these things, and you'll notice I use present tense language because we're already noticing a lot of these things happening right now. I recently read an article by Bill McKibben, the founder of [350.org](http://350.org), and he stated it perfectly: Global warming is not a future threat; it's a present reality, a menace not to our grandchildren but to our present civilizations. I for one love Nebraska. It's a beautiful state and I'd like to continue living here in the future. And climate change, you know, the debate is over. The facts are in and I think to answer the question of should we have a special committee to address these issues, the answer is, yes, 1,000 times over yes. And it's a very obvious answer to me and I think to many citizens of Nebraska. [LR455]

SENATOR KRIST: Thank you. Any questions for Ms. Spooner? Thanks for coming. Next proponent. [LR455]

SCOTT WILLIAMS: Good afternoon. My name is Dr. Scott Williams, S-c-o-t-t W-i-l-l-i-a-m-s. I live at 312 South 16th, Omaha, Nebraska, 68102. I hold a Ph.D. in engineering from Iowa State University. I'm a resident assistant professor and I teach energy technology, although today I don't speak for my institution. Today I'm here as a citizen and a voter, as a proponent of LR455. Thank you for the opportunity to speak with you. I ask you to support this resolution and show the leadership that Nebraskans seek and that literally every single person speaking before me today has strongly supported. I thought about how I'd prepare my remarks and I figured the best way to go about it was to use sources that you might already be familiar with if you've had the opportunity to seek them out. And one of them I expect you are familiar with. It is the report from the University. There are three things that I wanted to highlight. They're directly from the front and they lay out the case for why we should have this resolution and why we should create a framework in Nebraska to address climate change. "Globally, we face significant economic, social, and environmental risks as we confront the challenges associated with climate change." This is the very first sentence from the Executive Summary of this report prepared by the public university here in our state. This is the reason why we need to address climate change, why we need to create a framework in order to have a guiding document to tell our state, our Legislature, our executive, and the citizens and the people of Nebraska how we should respond to the immensity of this challenge. There's good news in this report and it is highlighted in the resolution as well. "Imbedded in each of these challenges are opportunities." We see formidable obstacles to the changing climate. These have been mentioned by my colleagues and friends and citizens: drought, the drying up of farmland which is, as was described, the bread and butter of our Corn Belt here in Nebraska; and numerous other obstacles that are in front of us. But there are also opportunities, as was highlighted, with clean energy technologies. I was one of the members of the carpool in the electric vehicle that drove down here, which is actually parked

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right across the way. And as a side note, you might have figured out at this point that last gentleman was my twin brother. (Laughter) [LR455]

SENATOR KRIST: I just thought I was seeing double. [LR455]

SCOTT WILLIAMS: Yes. No, you're not seeing double and I do think that means we do get two chances to speak in support of this resolution. (Laughter) I am Scott Williams, S-c-o-t-t. The Executive Summary of this report highlights exactly why and how significant it is that we address this problem. "It is critically important to point out that the implications of and potential impacts associated with observed and projected changes in climate will be closely associated with the management practices employed." This is why we have to take action. This is why our state needs a guiding document, a framework, a piece of structure that we can follow, that we can listen to, that we can look to for leadership. The second source you may be able to identify. "The environment is a fundamental good. Mankind is not authorized to abuse it and much less authorized to destroy it." If you recognize from the direct words or from the language, this is from Pope Francis' Laudato Si', the encyclical on climate change "On Care for Our Common Home." And he gives us guidance on how and why we should be addressing this problem. Quote: The ecological crisis, together with the large-scale destruction of biodiversity, can threaten the very existence of the human species. This is why we need to take action and this is why I'm so pleased and proud of all of you sitting around the table today who are here meeting and talking, discussing and moving forward with a plan of action, a response, a framework to the climate change that Nebraska and the rest of the state, our nation, and the world is facing. "There is nobility in the duty to care for creation through little daily actions." I ask you, I urge you, I implore you to show the leadership that every single person speaking today has asked for. Please help lead our little daily actions. Please help create the framework that we need to guide us to respond to the challenges of climate change and to take advantages of the opportunities for Nebraska ecologically, economically, and socially now and into the future. Thank you. [LR455]

SENATOR KRIST: Thank you, Dr. Williams. Any questions? Seeing none, any other proponents? Any opponents? Anyone in the neutral? Welcome. [LR455]

JOHN ERIXSON: (Exhibit 6) Thank you. Good afternoon, Senators. My name is John Erixson, J-o-h-n E-r-i-x-s-o-n. I am the deputy director for the Nebraska Forest Service and I will be testifying in a neutral position. The Nebraska Forest Service staff led the forestry and fire roundtable in October of 2015. The discussion was aimed at engaging key stakeholders from conservation groups, forest industry, landowners, agriculture, and our communities. I'd like to share just a few of those findings from that roundtable. Whether from increasing damage due to wildfires, insects, floods, drought, heat, or severe weather events, there's no doubt that we are seeing changes in the health and vitality of our forests. Nebraska has seen an increase in the

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frequency and the number of large, intense wildfires over the past 50 years. The state used to see large fires every 25 years. Since 1990 that time has decreased to about every six years. The scale of these wildfires have also increased. Fifty years ago, a large wildfire season would have been 150,000 acres. In 2012, nearly half a million acres burned. Nebraska's Pine Ridge once occupied 250,000 acres in the western part of the state. With repeated wildfires over the past 20 years, the Pine Ridge is now about 90,000 acres. Projections suggest with climate change that we will see the 2012 type of weather by the middle of the century more frequently than we do now. Many Nebraskans have seen the damage caused by mountain pine beetle in the forests in the western part of the United States. Nearly 46 million acres of pine forests have been destroyed from this beetle. Mountain pine beetle was found in Nebraska for the first time in the Wildcat Hills and in the Pine Ridge in 2009. This insect will have a devastating effect on our pine forests. One of the reasons we believe that mountain pine beetle is surviving in Nebraska is because we no longer have the extended periods of cold weather that we used to have in the state. These are periods below 4 degrees to minus 40 degrees that normally kill the insect. So with that, those are some of the highlights of the findings. I'd be happy to answer any questions. [LR455]

SENATOR KRIST: Just to be clear, why are you neutral? [LR455]

JOHN ERIXSON: It's a requirement of the University of Nebraska Forest Service... [LR455]

SENATOR KRIST: Okay. [LR455]

JOHN ERIXSON: ...that we testify in a neutral position. [LR455]

SENATOR KRIST: That's fine. Thank you. Senator Chambers. [LR455]

SENATOR CHAMBERS: Could serious enough fires in the Pine Ridge and Wildcat Hills affect the wildlife population? [LR455]

JOHN ERIXSON: Yeah, wildlife, and I'm not an expert in wildlife, but wildlife need several components. They need habitat, they need food, they need water. And the forest canopy provides that habitat they need for rearing their young, for protection from the elements, and also for just general shelter. So, yes, it could. [LR455]

SENATOR CHAMBERS: Thank you. [LR455]

SENATOR KRIST: Thank you, Mr. Erixson. Any questions? Great. Thank you very much. [LR455]

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JOHN ERIXSON: Thank you. [LR455]

SENATOR KRIST: Thanks for coming. Senator Haar to close. [LR455]

SENATOR HAAR: Well, thank you very much for your patience. Again, I'm asking for a special committee that will come up with a framework for a climate action plan. It's a very serious issue. It crosses many committee jurisdictions and it would create a planning process for future legislative action. And I would just like to end--I have actually read the whole Pope's encyclical--with just a couple words. He said, "I wish to address every person living on this planet." The time for seeking global solutions is running out. We can find suitable solutions only if we act together and in agreement. Thank you very much. [LR455]

SENATOR KRIST: Thank you. Any questions for Senator Haar? Okay, that concludes the... [LR455]

SENATOR LARSON: I do. [LR455]

SENATOR KRIST: Oh, I'm sorry, Senator. I didn't see your hand. (Inaudible.) [LR455]

SENATOR LARSON: That's all right, Senator Krist. Senator Haar, given the recent climate agreement in Paris,... [LR455]

SENATOR HAAR: Yes. [LR455]

SENATOR LARSON: ...you had a lot of supporters, and I understand that, but obviously the entire world is working towards a number of different things. But that climate agreement... [LR455]

SENATOR HAAR: Yes. Yes. [LR455]

SENATOR LARSON: ...with the United States was part of it as well. What targets are you hoping to get out of LR455 that that agreement doesn't lay out already substantially in terms of the entire United States, just not the state of Nebraska? And does that necessarily, if we have a more strict one than what was laid out in Paris, does that hamper the Nebraska economy in a detrimental way because of...compared to what was agreed upon in Paris? [LR455]

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SENATOR HAAR: Good. I'll give you a short answer and then I invite you to come to my office and (inaudible). [LR455]

SENATOR LARSON: Because I'm familiar with what was laid out in Paris. [LR455]

SENATOR HAAR: Yeah. Again, no, a good question. Everywhere is different when it comes to the mitigation efforts and also to the adaptation areas. And so what this study would do is what the university study started with and that's talking about climate change in Nebraska. And so what this study committee would do is to gather information and, yeah, we're going to bump up against what's happening in the world, but this would be pretty much Nebraska Central Plains specific. [LR455]

SENATOR LARSON: I guess my one concern is, specifically, is I mean obviously we can talk about countries around the world and why Paris was so controversial. [LR455]

SENATOR HAAR: Sure. Sure. [LR455]

SENATOR LARSON: Moving forward, if we, you know, we had the young Indian individual talking about, you know, specifically what these countries moving into First World status in India, China,... [LR455]

SENATOR HAAR: Uh-huh. Uh-huh. [LR455]

SENATOR LARSON: ...and what they're doing in terms of their mitigation efforts. And I worry in terms of...regardless of how big the threat of climate change is, and I think Paris displayed that in terms of what the world's view of climate change, the dangers of it. [LR455]

SENATOR HAAR: Uh-huh. [LR455]

SENATOR LARSON: I guess my significant concern is we as a country, the United States, came into that agreement and we are going to work towards that agreement. And I understand that Nebraska has mitigation efforts of its own. [LR455]

SENATOR HAAR: Uh-huh. [LR455]

SENATOR LARSON: But I worry about binding future Legislatures, depending on what would come out of something of this nature, to...and somehow if we were to bind future Legislatures to

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work toward this mitigation agreement that is more strict than what is coming out of Paris... [LR455]

SENATOR HAAR: Uh-huh. [LR455]

SENATOR LARSON: ...and what is coming out and, you know, hampering our economy. I think we see that in California to a certain extent at times... [LR455]

SENATOR HAAR: Uh-huh. Uh-huh. [LR455]

SENATOR LARSON: ...and in terms of what that does to their economy. And we can talk about a number of other things. But I just...that's kind of one of my concerns, given how...the breadth of what happened there and what other countries are doing for mitigation and how that affects us. I know the United States has a role to play but we have to be careful in terms of that as well, especially if, you know, it's a tragedy at (inaudible). And you understand that as well as anyone,... [LR455]

SENATOR HAAR: Sure. [LR455]

SENATOR LARSON: ...especially with climate change because that's what's happening. But that's just one of my small concerns. And you know, like I said, what happened in Paris happened and we're kind of following. The United States is going to try to follow it. So I guess I'm trying to figure out what... [LR455]

SENATOR HAAR: What role we can play? [LR455]

SENATOR LARSON: Yeah. Yeah, and why, and if this becomes a bigger thing that could hamper the Nebraska economy moving forward in a certain way. And so it's not an answer probably. It's just more of a concern and one of understanding Paris and what happened that you can see (inaudible). [LR455]

SENATOR HAAR: Well, real briefly, we're going to have to work primarily on adaptation I think and this committee, this study committee, would simply come up with a framework. For example, here's Colorado's plan that I would be willing to share with anybody. They've been working on it for years. This committee would not come up with something like this. What we would be working on is a framework to eventually, for future Legislatures, to come up with perhaps things like budget items, legislation, whatever. So it's just the first step. I would see no

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mandates coming out of this study committee. If there are mandates in an actual plan, that would have to come from future Legislatures. [LR455]

SENATOR KRIST: Okay. Any other questions? Thank you, Senator Haar. Thank you all for coming. Just a word for the committee. You don't have to go home but you can't stay here, so. (Laughter) Just for the committee, these are your packages for the people who have volunteered to be on those LR committees that we will meet tomorrow and assign. Thank you. [LR455]