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Bioscience Steering Committee
December 08, 2016

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The Bioscience Steering Committee met at 2:30 p.m. on Thursday, December 8, 2016, in Room 1524 of the State Capitol, Lincoln, Nebraska, for the purpose of conducting a public hearing. Senators present: Adam Morfeld, Chairman; Jerry Johnson; John Kuehn; Heath Mello; and Paul Schumacher. Senators absent: None.

SENATOR MORFELD: Welcome, everybody, to the Bioscience Steering Committee public hearing. I would like to...we have one invited testifier today, and so we'll have time for questions. And then we'll also go into Executive Session to talk about the next steps of the committee in terms of our recommendations to the full body of the Legislature. I'd like to thank the committee staff for being here today: Laurie Vollertsen, who is acting as our committee clerk; and Julia Holmquist, who is my legislative aide. And we will start with Jerry Johnson. Senator, would you like to introduce yourself and (inaudible).

SENATOR JOHNSON: Senator Jerry Johnson, District 23.

SENATOR SCHUMACHER: Paul Schumacher, District 22.

SENATOR KUEHN: John Kuehn, District 38.

SENATOR MORFELD: And Adam Morfeld, District 46. And Senator Heath Mello is here. I'll let him introduce himself.

SENATOR JOHNSON: As if he needs one (laughter).

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

SENATOR MORFELD: And we are recording the proceedings today. I don't believe it's live, but there will be a committee transcript for the record. And with that, we'll get started. Mr. Kozera, thank you.

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PHIL KOZERA: (Exhibits 1-3) Thank you, Senator Morfeld and committee members; really appreciate the opportunity to be here and to collaborate on the bioscience study. We think as Nebraska looks to consider an economic future that really emphasizes high-wage job opportunities that the biosciences are a strong strategic fit. In Nebraska we have a solid foundation of industry expertise, we really have some significant research happening at our universities, and I think we have committed government leadership. And within the report you'll find some recommendations that promote ways that we can communicate more effectively, ways that we can collaborate more and leverage our existing resources in a more effective manner. Additionally, you'll find opportunities for policies that will be more supportive, a wide range of policies ranging from innovation zones to a new venture fund. But I think at the end of the day, really, it's our hope that you see this report as a tool with the purpose of providing meaningful recommendations for the use of tax dollars, and that we're able to leverage Nebraska's strengths and really look at ways that we can assist innovative companies, add significant jobs, and overall increase the prosperity of Nebraskans. And so just a quick summary of the report, you know, it talks a lot about the strengths that we have and that's really good news. We have very significant strengths within the biosciences in Nebraska and the report will go into that in a little more detail. There's also some recommendations. Obviously the current financial situation, wanted to take that into account, and there's some modest recommendations that we can do to assist. And then there's also opportunities if we want to compete more strongly within the industry, we have some recommendations within that as well. I also just wanted to point out, to start, there were some...a lot of information. It's a robust report but there are some interesting facts, as I read through it, that really stood out to me and I'll read a few of them: Life sciences graduates from Nebraska universities, primarily UNMC and UNL, have increased by 68 percent over the last decade. So you can see that there's a shift in this area and an emphasis in this area. Nebraska is a significant hub for clinical trials with the highest activity for clinical trials of all states proportionate to our state population. So a lot of pharma happening in Nebraska; I think the majority of us don't realize that though. Bioscience-related patenting activity has steadily increased, rising from 90 patents in 2012 to 145, with the greatest percentage being in the biosciences, followed by medical device and then pharmaceuticals. Average wage in our sector are much higher than the state average wage, by over 50 percent, and have increased faster in recent years. And Nebraska has a particularly strong concentration within the agricultural, feedstock, and chemicals industry which has a location quotient of 5.24 percent and an increase

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of over 10 percent in average wage. So we certainly, just with this snapshot, we can see we have a significant footprint but wanted to have a little conversation about, you know, what does success for the biosciences look like. And, you know, depending on who you're talking to, you might get a different answer, but I think overall we really want to make sure that we have stronger bonds between industry, academia, and investors. I think one of the assets that we have in Nebraska is the spirit of collaboration and so I think there's a great opportunity there for improved networking and dialogue. And our goal is to create vibrant centers for innovation, mentorship, and collaboration. We'll talk a little bit about the clusters in a few minutes. But I think when you look at some of the significant strengths that we have, there are certainly areas for us to build off of. But under those we obviously have a work force shortage, so we need more high-skilled labor. We certainly recognize that there's a need for more university and community college graduates that have an understanding of working in a regulatory...or a regulated environment, and resources to really take some of the new technologies and take them from kind of conception to commercialization. And then when we take a look at the brand that we have here, that report cites the fact that, you know, we have a significant footprint but we really haven't taken that and developed a brand around the life sciences. I'll give you an example of what they've done in Kansas City. You know, the reality is we have as many, if not more, animal health assets in Nebraska, but the Kansas City area has done a tremendous job of really branding themselves as the Kansas City Corridor. Now Iowa is taking a step. They're creating a Cultivation Corridor. But I would say that that is not as well defined and when people hear the Cultivation Corridor, they don't know exactly what that means. But I think that's an opportunity that we have here in Nebraska. We look at some of the key industries that we have that we really have a strong footprint. Obviously agriculture is the foundation of Nebraska. But within that foundation, we have significant, significant footprint. Companies like ADM, Cargill, Novozymes, Merck, Zoetis, you know, they all call Nebraska home. They all bring in innovative people. They're all working on cutting-edge technologies. They all play different roles. And we're really starting to see a trend of some of these companies that are now partnering with some of the start-up companies to develop these pilot concepts and part of that is just due to the fact that for a lot of the large multinational organizations, their research and development budgets have decreased and they've put more emphasis now on trying to go out and find those technologies and partner with those companies. And I think Nebraska has a really nice footprint to do some of those types of activities. We look at the industrial biotechnology, the fuels and the

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bioproducts. We have 25 ethanol plants throughout Nebraska and those ethanol plants are wonderful examples for us to be able to market some of the tag-along technologies and recruit that shift from selling things from the ton to the pound to the ounce and really increasing the value that we have coming out of those locations. And then healthcare, especially when you look at that corridor between Lincoln and Omaha, there are really some significant things happening on the healthcare side in Nebraska. And so we see those as really three strategic clusters that we can use to leverage market and grow. We also have some real strengths in addition to those industry clusters. When we talk about education, we know we have a work force shortage, but we really have a high-achieving secondary school. I mean our graduation rates, right, are second only to Iowa. And we've seen significant growth in the type of graduates that are coming out of the university system. We've also seen the community colleges respond to some of the industry needs in developing some programs that are significant. Southeast Community College right now has a biotechnology program that they just kicked off the ground, and there are numerous programs within the University of Nebraska that are also having a positive impact. For our business climate, overall the economy has been healthy compared to our peers. We have a strong culture which is recognized within the report. I think companies find that the work force here in Nebraska is productive and that they're willing to work and so we have some tremendous things there. We're also seeing kind of on the innovation side, we're seeing incremental growth in the innovation economy. And I see that there's more of an appetite for risk than there has been in the past. We talked about some of the key industry clusters that we can leverage and then some of the collaborations that are happening. I mean we can look at Nebraska Innovation Campus as an example of public-private collaboration. We have an iEXCEL academy that's going into Omaha that's going to be really the state-of-the-art training center for some of these high-tech, especially medical, companies and they're going to have strong partnerships and recruit companies from really around the country to come and receive high-tech training. And then from an association standpoint, I think there's a real willingness to work with other associations. Just from a Bio Nebraska standpoint, we have a good relationship with the Nebraska Renewable Fuels. We collaborate with Department of Economic Development and the Department of Agriculture. And so there's a lot of collaboration among like-minded entities. And along with the strengths, there's certainly some things that we need to improve on. We talked about the work force shortage. We certainly have a scarcity when it comes to risk capital, especially when we look at biotechnology. And some of the public sector incentives, right now our industry really does not participate in the

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state's kind of premier tax policy program, the Nebraska Advantage. There's always opportunities for us to take some of the collaborations and make them more effective, formalize some of those relationships, and bring I think industry and academia closer together. I think oftentimes you have industry is focused on industry's needs, academia is focused on what they're working on. And that opportunity to bring those two together to really see if they can collaborate and build some momentum and use the gifts that they each bring to the table for the greater good, I think there's an interest in doing that and I think there's an opportunity to formalize that a little more effectively. And what we've found in this report is that we have graduates that are coming out of the university but they're really unaware of what those opportunities are, especially in the biosciences. I mean there's that understanding that if I graduate I have to leave the state of Nebraska to find a job in biotech and that simply is not the case. And so there are some things that we can do much more effectively to engage those students, get them on a pathway early on. I think the Intern Nebraska program has been helpful in that effort. I think expanding that to include outstate students is going to be helpful in that effort. But there are certainly some things that we can do to improve that. And some of this all parallels or mirrors one another but, you know, our patent activity is below the national average. And when you look at the quality of the research that's happening, the base that we have here from an industry base, I think bringing some of those entities together will help increase the amount of patents that are being placed as well. And then we talk...you heard about this during the testimonies that, for biotech, affordable wet lab space is a challenge. So in Nebraska, if you're a biotech startup, it's very difficult to find wet lab space to utilize; to take that concept and hopefully kind of lead it down that pathway to commercialization is very difficult to find that. When we looked at the policy umbrella, there are certainly steps that we can take as an industry to be more effective, to have a greater impact on the growth. There are some modest policy changes that we can do to continue the incremental growth of the industry. And then there are certainly some things that we can do that are more aggressive and we'll go through those in a few minutes here. But I wanted to hand out, I put together a little summary of many of the policy recommendations that are included. And, Senator Schumacher, I see you shaking your head, so (laughter) I know there's going to be a question there.

SENATOR MORFELD: Tough critic.

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SENATOR KUEHN: So much for game face.

SENATOR MORFELD: No poker faces on this committee.

PHIL KOZERA: I'd like to say I'm ready for it but I don't know that that's true, but what the heck. So there...as I said before, there's a wide range of policy recommendations really cognizant of the current economic climate and cognizant of the, you know, appetite for risk, and it goes everywhere from the way that we incorporate some of our tax policies to our venture funds. But within the report we took out four programs that we wanted to highlight that were four policy recommendations and four policies that we wanted to highlight that were action steps that we as private and public partners can take to try and improve or strengthen the ecosystem in Nebraska. And so that is handout number two. So when we look at the short-term, mid-term policy recommendations, for us, you know, a revision of the Nebraska Advantage would have a significant impact on the growth of the industry. Right now the Nebraska Advantage really prioritizes companies that employ high numbers of people. What we would like to see is a switch to higher quality jobs and incorporate also the capital investment that our member companies make. So typically our member companies will add high-quality jobs. Right now the average salary is \$68,000. But we won't add the number of jobs to qualify for the Nebraska Advantage, and so we'd like to see some type of change that really prioritizes that quality aspect versus the quantity. The second is expanding the angel investment tax...I mean based on the fact that those taxes are all gone after January 1, there's obviously demand for the angel investment tax. We like the idea that it incentivizes companies or individuals to invest in some of our start-up technologies. But there's a shortage of those credits and we'd love to see a system that is set up where we have some targeted credits for biotech so that we can continue to incentivize people. In Nebraska, investors are comfortable investing in some of the more traditional aspects: ground, malls, apartments--all good investments. But we'd love to see some incentives to get them to use some of their capital in the biosciences. Increased funding for Business Innovation Act: The Business Innovation Act has been a great success. I think if you talk with many of our start-up companies, they've been able to take advantage of this program. One of the great aspects of this program, it also leverages federal dollars and brings those into Nebraska. It also brings the university and industry together for collaboration. But compared to our peer states, the Business Innovation (Act) fund is funded at a level far below some of the other states that we'd like to

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compete with. And as an interim step, certainly we'd be open to seeing some of the existing funds just directed to biotechnology. And then the establishment of innovation zones, and the concept behind the innovation zone is to really look at some of the assets that we have, so education institution, say University of Nebraska Medical Center, and they partner then with a for-profit entity and use those tax credits, sell those tax credits to the for-profit and hopefully use those tax credits to offset maybe the cost for wet lab space. And that's a way for us to address one of the issues that we have with space and facilities for the start-up community. So those are four of the...for the policy recommendations that we'll highlight today. And then when we look at opportunities for us from a private partnership, I think work force is an area where we really, as an industry, need to get behind. And we have some really good dialogue happening right now with Southeast Community College and the University of Nebraska on trying to develop a pilot program where we utilize leaders within our industry, get them engaged, get them in the classroom, and then, conversely, get those students out into industry so they can see firsthand what's happening here. What I like to say is a lot of it depends on what's your interest level. Some people like the fact that they have the security of working with a large multinational organization. Other people want more flexibility. And when I go to one of our members that's a large multinational, I have to make sure they know I'm coming, I have to make sure I check in at the gate, and I have to make sure I go through all the processes just to enter the building. When I go to one of the start-up companies, the odds are, I might be met by a dog before I actually see a person. So, you know, a lot of that is tailored based on the individual's interest. Wet lab space, we have some really good conversations happening now with Department of Economic Development, Nebraska Innovation Campus, University of Nebraska, Invest Nebraska, in developing some wet lab space. Everybody recognizes there's a need; everybody recognizes that it's a benefit to the state. And so we see some good collaboration happening there. And we talk about network and marketing. Within our industry, as I said before, people are focused on whatever their responsibilities are. So when we have a networking event, it's an opportunity for people to take a timeout, get together, and maybe share an idea, share a challenge that they're having. And odds are, there's going to be a solution from somebody within that group or from someone's sphere of influence. And so we found that networking is a great way to strengthen some of the bonds. I think we need to figure out more effective ways of doing that. From a marketing standpoint, I think there's an opportunity for us to collaborate with the University of Nebraska, the state of Nebraska, and our industry partners, and figure out how we can better

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market and brand the assets that we have, because that's going to help us with recruiting, that's going to help industry with sales, that's going to help the university with admissions. I think across the board we can see significant growth from that. And then the business recruitment, a similar concept, if we look at those clusters and we interview the managers of those clusters and we find out what they like about Nebraska, and we have a pretty good idea of what that is, but if we organize that in an effective way, we can utilize that to then go out and recruit like-minded companies or some of those pilot companies that may be looking for some of the assets that a company like ADM may have or a company like Novozymes may have. And that infrastructure that's already in place is really advantageous to organizations when they're in that early stage because there are significant cost savings there. And that is a summary of our report. I'd certainly like to open it up for any conversation or any questions that you may have.

SENATOR MORFELD: Well, thank you very much, Phil. We appreciate your time that you've put into this, and particularly some of the documents kind of emphasizing some of the key findings and illustrating them. One of the questions that I had for you, and obviously one of our challenges that we have right now, is the budget...or the revenue situation, I should say. And looking at some of these, some of these seem like they'd be very expensive solutions given the current budget situation, and some of them seem like they're ones that may be feasible in the short term given that reality. One of the questions that I had was on the job training aspect here on the one-pager that you handed out: "Create a state organization to provide customized bioscience workforce training to companies locating to and expanding within the state." And perhaps I missed it in the report, but what would that look like? What would that person do? Would they identify a certain industry or company that is trying to recruit certain individuals and then work with the academic institutions or private market? How would that look?

PHIL KOZERA: I think you could set up so that the impact would be in both areas: (1) working with companies that are looking to come to Nebraska, because the question they always have is can I find a work force; and then also with companies that are looking to expand and that's always...especially with some of the larger multinational companies, you'll have a manager in Nebraska that's hoping to get an expansion and part of their dialogue always is, with those higher-ups, can he get the people in Nebraska to fill those positions?

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SENATOR MORFELD: Um-hum.

PHIL KOZERA: And so I think having a go-to source that would help facilitate and work with the university, as well as the community colleges, to develop those programs would be a real asset for both existing Nebraska companies and then companies that are looking. In the report they cite a program that was developed in Georgia and really the catalyst behind the program in Georgia was the fact that Georgia was recruiting a large global pharmaceutical company to be headquartered in Georgia, including a significant manufacture...like 5,000 jobs. The question was, how do I get the staff that I need? And so Georgia as a state said, we have a solution, we want you here, here is a program. Now that's an extreme level, but that's an example of what they did.

SENATOR MORFELD: Yeah. No, that gives me a better idea. And based on your experience, I mean, what would be the best agency that this person would be based at? Would it be DED or is there in particular? I mean I might be getting into the weeds but...

PHIL KOZERA: Yeah. I think the DED, especially from a connection with the industry and recruitment standpoint, that would make sense.

SENATOR MORFELD: Okay. Any other questions from the committee? Senator Kuehn.

PHIL KOZERA: Senator.

SENATOR KUEHN: As I was going through, and I like the slide that you have up right now, one thing...and I recognize SRI did their work as part of a larger economic development study. And state assets tend to look at, and state-commissioned reports, state assets. And it's a more of a comment than a question is, as I was reading through, many of the issues you addressed looked only at public assets either in the public university system, DED. And I guess more a comment for industry, when it comes to things like work force and wet lab space, I think probably one of the most underutilized aspects is our private higher education system. Our private colleges and universities in Nebraska have thousands of square feet of unoccupied wet lab space that does not require the contractual agreements and all of the complications that come with a public

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university. In terms of work force development, you know, our ability in a private institution of higher education with our emphasis on undergraduate teaching, as opposed to research, puts us in a unique position to be able to make programmatic changes, curricular changes, essentially on a dime. That is...it's much more difficult to do in a public university system. And so what I would encourage, based on this report, many of these ideas are great and they could also be accomplished by not simply focusing on the University of Nebraska system, the public community college system, although those are public investments that we should be asking to step up to the plate for this kind of development. But there's a lot of private dollars and a huge private infrastructure that is present and ready and may be able to partner, especially when state dollars may not be available, in a...and be a willing partner to meet both work force and space needs in a very cost-effective manner.

PHIL KOZERA: That's great.

SENATOR KUEHN: So I encourage the industry to look at that resource as you go forward and, you know, engage in some of those conversations and dialogue, so.

PHIL KOZERA: Thank you. Yeah, that's great. That would be great.

SENATOR MORFELD: Thank you, Senator Kuehn. Any other questions? Senator Schumacher.

PHIL KOZERA: Is it over? (Laughter)

SENATOR MORFELD: You're not dismissed.

SENATOR SCHUMACHER: What's it worth to you? (Laughter)

SENATOR MORFELD: Senator Schumacher.

SENATOR SCHUMACHER: The report seems to kind of be based on interviews with I think they said 20 stakeholders. How are...who are the stakeholders? How are they identified?

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PHIL KOZERA: So the stakeholders were all industry representatives. We tried to look at a diverse group, meaning some that have the ag biotech, some on pharma side, some on the device side, some were the smaller start-ups, some were the large multinationals. So we tried to get a cross-section of our industry.

SENATOR SCHUMACHER: And who were they?

PHIL KOZERA: Well,...

SENATOR SCHUMACHER: Is there a chart someplace and...

PHIL KOZERA: I can get that for you, Senator, who we interviewed. It was people from Streck to American Labs to Benchmark Biolabs to ADM to Novozymes to Nature Technology Corp. to NatureWorks, so it was a pretty...

SENATOR SCHUMACHER: All basically members of your association.

PHIL KOZERA: Not all of them but the majority of them.

SENATOR SCHUMACHER: Vast majority I think.

PHIL KOZERA: Yes.

SENATOR SCHUMACHER: One of the things that struck me in the report was that currently it said that the spending on biotech R&D, I take it at the university, equates to \$158 per capita spent on bioscience R&D funding. And I take that per capita as per citizen of Nebraska.

PHIL KOZERA: Correct.

SENATOR SCHUMACHER: So that would mean a family of four currently already is subsidizing the industry to the tune of about \$630 a year.

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PHIL KOZERA: Those are federal dollars, predominantly federal dollars that are coming in.

SENATOR SCHUMACHER: And they come from who?

PHIL KOZERA: A lot of them from, so, National Science Foundation, NIH, those types of organizations.

SENATOR SCHUMACHER: So we get, from the federal government to the university, \$298 million a year? That's a big figure; it's higher than anything I've ever heard. That's not any state dollars in there?

PHIL KOZERA: I can get an answer for you for sure, a breakdown of those dollars, but predominantly federal dollars.

SENATOR SCHUMACHER: In a couple of areas, with the Nebraska Business Innovation Act and angel investments, the report seems to point out that the recipients, or potential recipients, of those programs don't think there's enough money in them right now and there should be more.

PHIL KOZERA: Correct.

SENATOR SCHUMACHER: Are you aware of any government program where the recipients don't think there should be more money?

PHIL KOZERA: Governor...or, Senator, (laughter)...

SENATOR SCHUMACHER: Oh, what a promotion!

SENATOR MORFELD: Don't give him that much power, Mr. Kozera.

PHIL KOZERA: I need another Sharpie (laughter).

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SENATOR MORFELD: We are live, by the way. I just wanted to correct that. I said that wrong earlier.

PHIL KOZERA: Senator, I, you know, I think that's a good question. Our industry, one of the challenges I have with our industry is the fact that they are humble and I would really like them to tout their accomplishments more. And so I would argue that our industry are really good stewards of their resources that they receive. And when you look at some of the states that were utilized to compare the resources that we have directed, you know, I think the next closest was \$14 million. So there's a significant gap there but our recommendation certainly isn't that we meet that gap; it's just based on the demand and the success of the programs. We'd like to see more resources because one of the reasons why I think we've seen the growth in innovation, in technology, in biotechnology over the last seven years is partly because of the Business Innovation Act. I think it's a good piece of legislation and it's been effective in its use.

SENATOR SCHUMACHER: Now the bioscience area is just one factor of the state's economy.

PHIL KOZERA: Correct.

SENATOR SCHUMACHER: We've got manufacturing, we've got energy, we've got probably, if we sat down and just tried to break it down, we'd probably have a half a dozen or a dozen categories. Comparatively to the other categories in the economy who also would like to see increased grants, increased angel investment, increased anything they can get from the government, how does this compare?

PHIL KOZERA: So I think the differentiator for us is the quality of jobs and the wages. So we'd like to see Nebraskans get a pay raise going from the average salary up to \$68,000 a year, which is the average salary within our industry, and so the justification for supporting the biotech industry I think gets back to the quality of jobs. And it's not just the Ph.D. and master-level jobs; we have significant wages that are paid in our manufacturing plants so that people that are actually working and doing the manufacturing, we have significantly higher wages. And so I know you have difficult decisions to make and what we're asking is just for some consideration of the industry. You can look at the mission of the industry: healing, feeding, fueling. Many of

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our members are working on transformational concepts in technology. But at the end of the day, if you look at the quality of the jobs that are produced, I think that is hopefully part of the equation when you look to make decisions about resources.

SENATOR SCHUMACHER: Was there anything in any of the data--I didn't see it as I read through it but I could have missed it--that...an average doesn't tell anybody much because you can have a bunch of people making \$20,000 a year and the top guy making \$2 million a year and that's going to give you one heck of an average. Any income distribution across industry, a graph, a distribution chart that would show us where the...how that average is, what the standard deviation of that is, what the mean and median and mode is, what's the variance in those jobs, how they compare to others? Quite frankly, \$68,000 a year in what's supposed to be a "hi-fi" industry is not very much.

PHIL KOZERA: Well, I think, you know, I would just give that consideration to the family that's making the average now. And if they were able to be bumped up to that \$68,000, that has an impact, Senator, I mean, I think that has an impact on...

SENATOR SCHUMACHER: Well, but that's a private sector thing. I mean there's no way, even if we double this, whatever, Business Innovation "thingy" from \$7 million to \$14 million or threw an extra \$2 million or \$3 million into the subsidizing the angels to want to make investments so they can make money for themselves, even doubling, peanuts in the context of the real world. Seven million dollars on Business Innovation, another \$2-3 million on angel investment--that's just a tiny, tiny, tiny amount of money in the context of the real world, of the private sector. So why even look to the government? Why not...and you're doing a great job as a private sector. Why here? We maybe can create an office of something to give somebody authority to help or do this that doesn't cost us anything. But a few million bucks, that's not going to create the density, that's not going to create the...make this particular spot a spot in the country for where people want to invest. It's not even going to tell us whether or not this is a smart...if you have only a few nickels to invest, whether this is a smart place to put it. I'll argue with some people all day long the smart place is in nuclear energy right now; probably won't get very far, but that is a smart place for it. But so we're not talking about this business subsidy addiction we've got making a big difference. I mean, my gosh, how many hundreds of millions of dollars

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at ADM stuck out at the plant in Columbus for alcohol? This kind of money doesn't make a difference, nor does picking a winner or loser with somebody that has a little idea. Instead of trying to subsidize their investors or whatever, wouldn't it be better if we taught them how to organize their capital, how to educate somebody to invest in them, rather than...so they feel comfortable investing in it? This...I don't see where what is being requested here, at least in financial component, makes much difference.

PHIL KOZERA: You know, I could certainly understand the challenge of trying to manage tight resources and public dollars. But my perspective would differ in the fact that, you know, I've seen companies come to Nebraska because of the SBIR matching funds. I've seen companies really take advantage of that prototyping grant to start new companies after already having developed one successful company. And in my conversations with some of our member companies when they are talking with their leadership on advantages to Nebraska, there's a long list of things that they can list. But part of that equation in a competitive recruitment/economic development equation is what type of incentives are available. I mean it's something that they factor in.

SENATOR SCHUMACHER: What's the anomalous effect of those incentives? The prototype thing, that's the half a million dollar grant and they just give it to somebody? Well, to the extent we have to take our \$7 million or \$9 million, whatever it is, a year and give away \$500,000 to this company who happened to have the "knowwithal" to know that they can go down and try to get some money from the government, but to build that mousetrap, what disincentive is for the next guy to build his mousetrap, even though it might be a better mousetrap, knowing he's competing with somebody who just got \$500,000 in free money? I mean we haven't looked at any of those issues when it comes to the free money things and the very minor amounts of free money, nor have we discussed them, nor are they discussed in this report. So, I mean, if there's things that the industry wants to do and we can facilitate doing them by removing a regulation or something, then let's go through it. But looking to government subsidies that are really fairly meaningless in nature in the context of the kind of money that is needed to really become a bioscience competitor, even if we were floating in money, would they be a good idea? I guess I don't have anything else.

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SENATOR MORFELD: Okay. Thank you, "Governor" Schumacher. Senator Mello.

SENATOR MELLO: Thank you, Chairman Morfeld. Always...always a pleasure, Phil, to have you in front, and always a pleasure to sit next to my good friend and contrarian, Senator Schumacher. It may be just a recollection maybe in the sense of how the...how we got to the report, because looking at some of the recommendations are things that I know we talked about, potential policies that may have come up. But the tax incentive, tax credit component, it is my understanding to some extent that part of the challenges with a lot of the start-up companies and/or, I would say, to some extent, the intellectual capital-based companies that sometimes we see are not always invested in by the private sector, like a Google and others, when they're initially created and started that a lot of the entities don't qualify for a Nebraska Advantage tax incentive program because of the, simply, number of jobs that they can't meet, they can't create that ten-job threshold, thus, they're really not available for the state's main incentive or economic development program. Is that kind of...because that's kind of been...

PHIL KOZERA: That's correct, very much so.

SENATOR MELLO: Okay, I think that's...I think in light of I know my friend Senator Schumacher, myself, and others have been working on a number of things regarding tax incentives and tax credits when it involves the state. But I think it goes without saying that that is kind of the impetus of how this idea was created of this industry, to some extent, having such a major impact on the agriculture industry in the state. It just kind of gets left behind or left out of the bigger framework, so to speak, because most jobs that are created by start-up companies don't reach a very high threshold until they reach a very mature stage of capitalization and a mature stage of the corporation.

PHIL KOZERA: That's correct.

SENATOR MELLO: A couple other things, and just maybe it's one of the ideas or policy recommendations was the venture funding. And I did have to remind my good friend Senator Schumacher that he had come up with an idea like this a couple years ago in front of the Appropriations Committee...

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SENATOR SCHUMACHER: It died there.

SENATOR MELLO: ...referred as the (laughter)...referred as the "Pete" Act, if I'm not mistaken,...

SENATOR SCHUMACHER: It was "Dave" before "Pete."

SENATOR MELLO: ..."Dave" Act before "Pete" Act, in the sense of looking to create a venture fund...

PHIL KOZERA: Yes.

SENATOR MELLO: ...with state dollars, a very sizable state fund that would utilize public dollars for private investment. Did you look at, at all--and I see that you wrote just the University of Nebraska Foundation assets toward venture funding--was there, at all, discussion, at all, looking at other state operate...like the state has an operating pool fund of state agencies that involve also the state's Cash Reserve and a number of cash funds across state government. Was that an option at all that was considered, as well, or was it...

PHIL KOZERA: Yes.

SENATOR MELLO: ...more just looking at the University Foundation funding because they have more of a direct connection with some of the other policy recommendations?

PHIL KOZERA: We did look at that other option, but the scope of that...I think that is a direction we could look at. But to your point, Senator Mello, we did consider the university simply because of the connection,...

SENATOR MELLO: Okay.

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PHIL KOZERA: ...the relationship, and the benefit, and the fact that when you look at the investment funds that they have available, they already have a percentage of those dollars focused on high-risk assets, so that there was a connection there as well.

SENATOR MELLO: Okay. And I don't want to repeat some of the good dialogue you had with my friend Senator Schumacher. I guess it's more of question regarding the Business Innovation Act. And maybe it's more of some clarification because my understanding of that, the Business Innovation Act, that \$7 million is available to a number of different industries that tie into more innovation-driven businesses in the sense of whether it's new products being developed, whether it's new research being worked on, whether it's new software that's been designed. So that Business Innovation Act funding is not just for the bioscience industry; it's for a number of industries.

PHIL KOZERA: Correct.

SENATOR MELLO: Okay. And to some extent the challenge, as much as anything else, when you've got a finite amount of resources for a very large number of potential industries is the reality is what your request is, or kind of what the recommendation, I should say, is, is to try to ensure that some of that Business Innovation Act funding is being highlighted, or maybe more targeted towards the bioscience industry aside from some of the other industries that may be able to apply and get 95 percent of the funding, so to speak, where the bioscience industry right now may get 5 percent or vice...you know, or 20 percent versus 80 percent. That's kind of what the recommendation I read made it sound like...

PHIL KOZERA: Yes.

SENATOR MELLO: ...is that you just want to make sure that there is some kind of designated percentage that goes towards the bioscience industry because of the high-wage, high-growth job potential that comes with the industry in comparison to maybe some of the other industries.

PHIL KOZERA: Correct.

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SENATOR MELLO: Okay.

PHIL KOZERA: Correct.

SENATOR MELLO: Okay. The last question I've got, it was about work force, and I think Senator Morfeld hit most of my question. The only other thing I had was the recommendation was creating a new state organization. Is there at all a...and I know the Governor has an Education, kind of, (and) Workforce Roundtable. Has this issue at all come up? And maybe if you're not privy to it, by all means...have you heard at all, is the Governor's Education and Workforce Roundtable at all trying to address this issue or at all digging into this issue of, kind of, the talent needs in the bioscience or biotech industry, knowing, kind of, even what Senator Kuehn was mentioning, the private colleges, the public college kind of relationships we've got in the state? Is this something at all that's being looked at from the Executive Branch end as well? Or is this mostly something that we discovered as part of the kind of the research of the report and it needs to be kind of elevated a little bit more discussionwise?

PHIL KOZERA: I'm not aware that the Governor is working on anything focused on, you know, biotechnology. And so this was a new concept that came about as part of the interviews and looking at what other states' best practices are.

SENATOR MELLO: Okay. Okay, great. Thank you, Phil.

PHIL KOZERA: Thank you.

SENATOR MORFELD: Any other questions for Mr. Kozera? Okay, if there are none, then we'll go into Executive Session now, discuss (recorder malfunction)...