

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON REVENUE**

**Eighty-First Session
March 4, 2021**

The Committee on Revenue was called to order by Chair Lesley E. Cohen at 4:02 p.m. on Thursday, March 4, 2021, Online. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/81st2021.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Lesley E. Cohen, Chair
Assemblywoman Teresa Benitez-Thompson, Vice Chair
Assemblywoman Natha C. Anderson
Assemblywoman Shannon Bilbray-Axelrod
Assemblywoman Venicia Considine
Assemblyman Gregory T. Hafen II
Assemblywoman Heidi Kasama
Assemblyman C.H. Miller
Assemblyman P.K. O'Neill
Assemblyman David Orentlicher
Assemblyman Tom Roberts
Assemblyman Steve Yeager

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Russell Guindon, Principal Deputy Fiscal Analyst
Michael Nakamoto, Deputy Fiscal Analyst
Joe Reel, Deputy Fiscal Analyst
Terri McBride, Committee Manager
Gina Hall, Committee Secretary
Cheryl Williams, Committee Assistant



OTHERS PRESENT:

Michael Brown, Executive Director, Office of Economic Development, Office of the Governor
Roland Stephen, Director, Center for Innovation Strategy and Policy, SRI International
Bo Bernhard, Vice President of Economic Development, University of Nevada, Las Vegas
Vic Etyemezian, Interim Vice President for Research, Desert Research Institute
Mridul Gautam, Vice President for Research and Innovation, University of Nevada, Reno
Karsten Heise, Director of Strategic Programs, Office of Economic Development, Office of the Governor
Jeffrey Saling, Co-Founder and Executive Director, StartUpNV
Kathy Flanagan, Senior Management Analyst, Southern Nevada Water Authority
Joshua Leavitt, Chair, Society for Information Management Las Vegas Chapter
Jonas R. Peterson, President and Chief Executive Officer, Las Vegas Global Economic Alliance
Anthony Ruiz, Senior Adviser for Government Relations and Community Affairs, Nevada State College
Carlos Cardillo, Director, Nevada Center for Applied Research, University of Nevada, Reno
Nathan Allen, Executive Director, WaterStart

Chair Cohen:

[Roll was taken and Committee rules and protocol were reviewed.] I will open the hearing on Assembly Bill 29, which revises provisions governing programs for the development and commercialization of research and technology in Nevada. With us today is Michael Brown, Executive Director, Office of Economic Development, Office of the Governor. He has several presenters with him. Director Brown, you may proceed.

Assembly Bill 29: Revises provisions governing programs for the development and commercialization of research and technology in this State. (BDR 18-256)

Michael Brown, Executive Director, Office of Economic Development, Office of the Governor:

The origins of the Knowledge Account go all the way back to 1980, when Democratic Senator Birch Bayh and Republican Senator Robert Dole enacted legislation in Congress that encouraged the commercial application of academic research through the National Science Foundation and other institutions with landmark legislation that made America competitive globally by trying to find innovation and commercialization of academic research.

By the mid-2000s—2005 to 2006—states started to formalize this and link it to their economic development programs, with the state of Utah creating something called the USTAR [Utah Science Technology and Research] Program being at the forefront.

It came to Nevada in 2011 with the creation of the Knowledge Account [Assembly Bill 449 of the 76th Session], at which time Karsten Heise, who works for the Office of Economic Development, Office of the Governor (GOED), was the original staffer and was one of the first employees at GOED. He has been with us since the founding of the department. He put this program together in partnership with Nevada's institutions of higher education, the Nevada System of Higher Education (NSHE), and the Chancellor. The purpose was to be a catalyst to promote research, innovation, and the commercialization of research for the benefit of the state.

It has operated on a small subsidy. The first funds for this program came in 2013, and since that time \$32.5 million of State funding has been put forward in this. The results [[Exhibit C](#)] are impressive:

- \$39.8 million has been generated in sponsored research contracts.
- \$35.2 million has been generated in grants and donations.
- 573 jobs have been created.
- \$1.2 million in commercialization revenue has been raised.
- 38 companies have relocated to Nevada.
- 29 companies have university-based operations.
- 17 companies have spun out of the research institutions.
- 75 faculty positions have been filled or receive at least partial Knowledge Account support.
- 139 student interns have engaged with projects and have been hired at affiliated companies.
- 21 student interns have engaged with projects at the three research institutions.
- \$108 million in venture capital has been raised by affiliated start-ups.
- 67 patents have been filed.
- 26 patents have been filed by companies incubated on our campuses.

This is truly a unique program that GOED functions as a facilitator for. As I have mentioned in earlier hearings, when I came in, recognizing my agency was now one decade old, I asked my staff to look at their divisions and figure out what needed updating. Karsten Heise had already started that process, recognizing that innovation is a constant rechanging world and was already endeavoring on legislation for you to consider, which has become Assembly Bill 29.

This is not a day where we are going to inflict death by PowerPoint. Instead, we are going to use this wonderful Zoom technology we have to bring you experts from Nevada and around the world who have been engaged in this over the last ten years. I counted 13 combined academic degrees, from institutions all over the world, for the four individuals I will introduce to you today. I think this is the most distinguished panel I have ever introduced in my career. We will start with Dr. Roland Stephen from SRI International. He joins us tonight from his home in Maryland. Dr. Stephen is also the author of Nevada's first

economic development program and the more recent *The Nevada Plan for Recovery & Resilience*. He has done work for the Las Vegas Global Economic Alliance, Clark County. I do not know that there is anyone outside of Nevada at this moment who knows more about Nevada than Dr. Stephen with the work he has been doing for the past two years for Nevada institutions. He has a Ph.D. from the University of California, Los Angeles (UCLA), with specialties in the area of innovation. He will be followed by Dr. Bo Bernhard, who started at Harvard with a dual major, and then held dual professorships at the University of Nevada, Las Vegas (UNLV) and today runs the Black Fire Innovation center at the UNLV Harry Reid Research and Technology Park. He is a fifth-generation Nevadan. Dr. Vic Etyemezian at Desert Research Institute (DRI) is a professor of academic science with a Ph.D. from Carnegie Mellon University, and is the Interim Director of Research there. As you know, DRI is our research institution with our students and is at the cutting edge of climate change and a whole variety of issues. Dr. Mridul Gautam will follow him. He is the head of research for the University of Nevada, Reno (UNR). He has also been one of the quiet heroes of the pandemic, ensuring Nevada's public health system has had the backup research they needed to meet all the demands we have had during the past year. I spoke with him many times as he ensured Nevada's laboratories and institutions had what they needed to address the public challenges we faced.

After they paint the big picture of what is going on in the world and here in Nevada, I would recommend we excuse them, and Mr. Heise and I will be glad to walk through the bill. I recognize you have a floor session that will possibly be interrupting us at 5 p.m. Pacific Time. I will turn it over to Dr. Roland Stephen to present the big picture of what the world looks like in the area of innovation.

Roland Stephen, Director, Center for Innovation Strategy and Policy, SRI International:

I will be brief but try to do justice to this very important question. One thing A.B. 29 does is provide a new name, and I think that is consequential. Here at SRI [SRI International], which takes new technology to market every year, more than a handful, we know that knowledge is not the same thing as innovation. Knowledge is great. Invention is great. We need it and we get it from federal funding and other sources. Innovation means jobs, means long-term economic growth. The way the Knowledge Account has been redesigned accelerates its impact on those two issues. In the long run, jobs and growth are the only things that matter from the point of view of state government.

How does it do it? I want to highlight several ways, but one in particular. It makes it more competitive, and that is good. The principal research institutions of NSHE have to compete for the money. They have to show their work, as a teacher would say, and that way the best ideas will rise to the top. But the best feature of it is the way it draws in the private sector. That leads to investment with purpose. It is not simply a question of, we have a great department here at UNR and UNLV, let us spend money on it. It is a question of, we have a great enterprise that needs technology developed in partnership with a Nevada research institution. That is where we place our bets. That is what will yield the kinds of results you want on the ground in the long run.

SRI International works through the National Science Foundation. We work with agencies around the world, bringing in the interests of the private sector and tying them to the research enterprise with this kind of investment is a best practice. The track record so far, rehearsed by Director Brown, is very good—\$108 million in follow-on venture capital, that is a good metric. Much else besides. The development of talent is very important, as is the building of networks and the starting up of businesses. I think the legislation before you is going to take these investments and make them more effective. That is all I have for now, but I am glad to answer questions as you see fit later on.

Chair Cohen:

Dr. Bernhard is our next presenter.

Bo Bernhard, Vice President of Economic Development, University of Nevada, Las Vegas:

As you heard earlier, I am an alumnus of Harvard. More important, I am an alumnus of Walter V. Long Elementary School in the Clark County School District (CCSD), followed by Kermit R. Booker, Sr. Elementary School, followed by Frank F. Garside Junior High School, and followed by Bonanza High School. I went off to Harvard but knew I wanted to come back to help contribute to a state we all love, and in this instance on innovation that we are all exceedingly inspired by and hopeful for as we move forward and out of this difficult economic time.

I will start with my own historical experience with this Knowledge Account. I was fortunate to be there in 2011 when this was first hatched from brains like Congressman Steven Horsford, who, of course, sat in this very Legislature and led this charge. Looking at the tens of millions that other states were investing in their own higher education innovation funds, he and others launched the Knowledge Account. At the time this was seen as a brilliant piece of legislation because it launched, for the first time, our first higher education innovation ecosystem, which was something that did not exist up to that point.

As someone who has been here a long time—at UNLV nearly a quarter of a century and I also hold a professorship at UNR—I can attest this did not exist before that time. Even more brilliant was a late addition to that legislation that said if one of these inventions that emerges hits it big, there was a built-in mechanism after a certain threshold where funds actually went back into the state's coffers. As an example, Gatorade at the University of Florida was invented by scientists there, and to this day generates \$12 million a year for the University of Florida in what was sort of a once-in-a-lifetime shot. But nevertheless, if something like that happened, how brilliant is that?

It is not only great legislation in and of itself, but there is also a really nice piece of this legislation that enables monies to go back into the state if things are a jackpot, so to speak. Somehow that part of [unintelligible] has been lost in translation. There is now a thought that perhaps this was intended to serve that purpose, that the very purpose was to generate

revenue. As someone who was there at the outset, the message that was conveyed to me at UNLV by the leaders of the legislators then was that this was an inspirational bill to build the ecosystem, and I believe that is precisely what it has done.

Because of time constraints, I will focus on just one success story. The innovation labs that were under my direction back when I was on the faculty have invented among other things a smart elevator: Window Magic, which transforms home windows and hotel windows into the television set, and on and on, has yielded more U.S.-issued patents than the rest of UNLV's laboratories combined. *CBS This Morning* arrived on the scene soon after, celebrating the innovation that was happening in Las Vegas, and as a kid who grew up in the CCSD, I can attest that Gayle King's conclusion on what we had achieved never happened when I was a kid in Las Vegas. Her exact line was, "Don't you just love smart kids," as they interviewed students who were participating in this innovation approach. The national media rejoiced.

More recently at the Harry Reid Research and Technology Park, these successes led to the construction of the \$35 million Black Fire Innovation facility I now oversee. It is our innovation hub at UNLV. The best part of that is the \$35 million facility took zero state dollars. Talk about a return on investment—from something that was started with \$250,000 in seed funding from the Knowledge Account. This also led companies such as Caesars Entertainment, Adobe, Intel, Panasonic, LG Business Solutions, Zoom, and US Capital Global, a major capital firm out of San Francisco whose CEO, Jeff Sweeney, is providing written testimony today, to move into the tech park inspired by this vision of a university-driven innovation ecosystem.

Moving forward, this will be the home to the famous room-temperature superconducting discovery you all heard about that made the cover of *Nature* and of course, was immortalized in Governor Sisolak's inspirational State of the State address. The lineage is clear. Black Fire Innovation at the Harry Reid Research and Technology Park never happens without the Knowledge Account.

I will not speak to other illustrations here, as I know my colleagues at the other institutions of higher education will, but the Knowledge Account has worked in the precise spirit, at least, that was intended by its creators. As we have heard already from Dr. Stephen, I believe we are improving upon a model that gave us for the first time a higher education infrastructure, that, as Director Brown has pointed out, gave us a seat at the innovation table for once and, for the first time and now moving forward, helps us innovate our way out of the most horrific economic time my home state has ever faced. My understanding is that this is the only \$5 million in the entire state budget at this moment dedicated to innovation. It would be a sad time indeed for my beautiful, resilient, and recovering home state of Nevada to lose out on this at this particular historic moment. Those are the only comments I have for the record. I am happy, of course, to answer questions afterwards.

Chair Cohen:

We will now hear from Dr. Etyemezian.

Vic Etyemezian, Interim Vice President for Research, Desert Research Institute:

Desert Research Institute's scientists, engineers, and technicians are problem solvers, and their research efforts drive discovery in areas that impact Nevadans [reading from prepared testimony, [Exhibit D](#)]. With support from the Knowledge Account, DRI launched the Healthy Nevada Project. With more than 50,000 Nevadans enrolled, it is one of the largest population health studies in the country and one of the first to provide results to participants. That is important because it allows the participants to discuss with their physician ways that they can lower their risks of developing certain diseases. The Healthy Nevada Project is now operated by the Renown Institute for Health Innovation (IHI). Together, DRI and Renown IHI have received more than \$40 million in combined research funding as a result of the Knowledge Account investment.

These investments also furthered our research into wildfires, which as you know is obviously very important for Nevada. Today, DRI is partnering with wildfire experts from across the country to update the models that fire managers use to battle wildfires. That expertise was born out of the work that GOED invested in at DRI.

Projects for more than 50 DRI scientists, staff, and students have been funded through the Knowledge Account. That has enabled DRI to start up new organizations, such as the Renown IHI, and to spinout companies such as Tu Biomics Inc., and WaterStart. These investments have an economic benefit to the state as well. An economic impact study found that for every \$1 DRI receives from the state, our scientists generate \$4.82 in grants and contracts, and that impact is roughly \$9 when including the direct, indirect, and induced benefits.

I would echo what Dr. Bernhard said: the Knowledge Account has worked in our view. We appreciate GOED's investment in DRI and we are hopeful the partnership will continue in the next biennium through the continuation of funding for research that fuels innovation. I am happy to take questions at the end.

Chair Cohen:

We will now hear from Dr. Gautam.

Mridul Gautam, Vice President for Research and Innovation, University of Nevada, Reno:

Our Knowledge Account-supported programs are providing early-stage companies a place to park where they can develop their technology and products, access expensive equipment they cannot afford, be able to hire our students as interns and later as employees, and be able to work with faculty experts. Through the Knowledge Account, you are doing exactly what the White House had recommended, that is enabling innovation, capturing the talent pipeline, and improving the business climate.

The Knowledge Account has sowed the seeds of entrepreneurship, economic development, and job creation in the state. We have brilliant minds and amazing entrepreneurs coming to Nevada with their dynamic start-up companies and inspired employees, and joining other Nevadans in setting up other small and mid-sized businesses in our region. They are hiring Nevadans and paying them nationally competitive salaries. Through their employee base, they are creating service-sector jobs. They are investing back into our companies, restaurants, coffee shops, grocery stores, gyms, car dealerships, highways, and K-12. These small and mid-sized companies are not looking for tax incentives or abatements. They are wanting to do it by themselves and they are doing it. They are sustainable, yet they are instrumental in the creation of stable, high-paying jobs and economic diversification. They are helping in workforce training by hiring our students as interns and they are hiring our graduates as regular employees in high-tech jobs. That is what I call transformative, diversified economic development—creation of long-term sustainable value.

The Nevada Center for Applied Research (NCAR) is made possible by the Knowledge Account. Today, thanks to the Knowledge Account support, NCAR has helped small companies that started with one or two people to grow to 20 to 60 employees. Let me share just a couple of examples. Among the several Bartech companies that have scaled up through NCAR is Bioelectronica. They started with one employee and today, after a successful investor round, they have 13 employees and are presently hiring more. More than half of their team are alumni of UNR. Bioelectronica recently graduated, as they like to say. They have moved out of the campus and have gotten into their own private space in Reno. They continue to do contract work with NCAR. This is exactly what is intended by the NCAR model.

You have all heard about Flirtey. It was the first company in the U.S. to complete a commercial product delivery by a drone, and one of their earlier drones is now in the National Air and Space Museum of the Smithsonian Institution in Washington, D.C. This started on campus with two employees, and after a successful funding grant with investors, they have grown to 30 employees. I remember these two gentlemen from Australia came with two duffle bags, literally, and rolled them into the office space, and they grew to 60 employees but because of COVID-19 are down to 30. So Flirtey is another one of our successful graduates.

Let me share two examples of faculty start-ups that are moving into research, into the market place, to benefit society and the economy. DxDiscovery was developed by a couple of our outstanding microbiologists and is bringing new technologies for rapid diagnosis of various diseases to the world. ALERTWildfire is deploying new technologies to allow first responders to quickly assess wildfires and more accurately determine the appropriate resources of people and equipment to deploy. ALERTWildfire is in place across Nevada, as well as California, and in parts of Oregon and Idaho. These businesses, products, and services they represent are made possible by the Knowledge Account support. We attracted job creation by start-ups that have scaled through NCAR, more than 490 jobs have been

created, and these are high-tech, bi-tech, advanced-manufacturing jobs, and some of these employees break out and form their own companies and hire more people. We do not even know where they are.

The Knowledge Account has also supported numerous important applied technology initiatives that have had huge economic implications. I will talk about two of them. Intelligent Mobility is testing new transportation technologies in real-world settings, in the streets of northern and southern Nevada, open areas, and rural settings. We call these "living labs," and these living labs are created under the leadership of GOED. There are many components to Intelligent Mobility. One effort is to minimize—hopefully eliminate—pedestrian deaths at intersections. We know what a serious problem that is. Another effort is contributing to better understanding of near-crash incidents. Although they are using technology to study interaction of vehicles to their settings, traffic signals, and such, this work will be foundational to the future of autonomous travel. Another research team has deployed and developed amazing new ways to combine drones or robotics by using underground settings in mines. This has important implications for exploration and safety, and this work is now being tested in Nevada mines and by the U.S. Department of Defense.

We at UNR are especially pleased to have partnered with our colleagues at UNLV and have started a business support program. It is called Sierra Accelerator for Growth and Entrepreneurship in both locations. It is helping those who do not have companies, teaching them how to access federal money, bring money back to the state, and start their own company. The Knowledge Account enables all of this to happen. Were it not for the Knowledge Account, we would not have had 490 jobs created by new and dynamic start-up companies. Were it not for the Knowledge Account, these companies in Nevada would not have raised venture capital in excess of \$108 million in this region. Were it not for the Knowledge Account, our graduates would be leaving the state in greater numbers, but now they are working for these start-up companies in Nevada. The Knowledge Account has been a game changer for the state.

Chair Cohen:

One thing that concerned me when I read the bill is I recall touring and having a meeting with DRI a few years ago, and learning that the researchers at DRI have to basically fund their own research. Do the changes in the bill and the changes this is going to cause for DRI mean that any of the researchers are going to have difficulty being able to support their research because of more competition?

Vic Etyemezian:

Our researchers have been supporting their research for quite some time, and that is the spirit of DRI. We bring in external funds and we work to apply those towards doing research that our faculty loves to do. I believe that the changes to the bill would not significantly impact the research that is being done; it might in fact serve to enhance it because it would enable partnerships with private companies. That is somewhat difficult to do right now because private companies are always a bit hesitant to partner up with public entities such as DRI because of the question of the unknown. In my view, I think it would perhaps be beneficial.

Chair Cohen:

Do we have any other questions for these gentlemen before we let them go?

Michael Brown:

We have had discussions with NSHE and the stakeholders this week, and we will be bringing an amendment that will restrict the private sector participation to only 20 percent of the available resources, and obviously encouraging them to partner with our institutions. We can discuss that when we get into the bill. I thought we had demands on the clock, but if they can stick with us while we walk through the bill, that would be wonderful.

Chair Cohen:

They are certainly welcome. I do not have any questions yet, so if you want, please go ahead.

Michael Brown:

What A.B. 29 proposes to do is build on the successes you have heard and update it in the constantly evolving evolution of Nevada's innovation systems. One of those changes will be to rename this from the Knowledge Account to the Nevada Innovation Account. This has no connection to the Innovation Zone that would be separately considered. The term, as Mr. Heise will detail and as Director Stephen pointed out, is really innovation, not knowledge. We had discussions with the stakeholders this week. As I said earlier, GOED is a facilitator of this, but the larger program is governed by a committee that I sit on, that the NSHE Chancellor now chairs, and the university presidents sit on. We meet every quarter to discuss what is going on in this area and what is in the area workforce. This is a consensus-driven process. I will now turn it over to Mr. Heise. He can walk through the high points of what we are proposing in A.B. 29, then we can take your questions.

Karsten Heise, Director of Strategic Programs, Office of Economic Development, Office of the Governor:

Thank you for the opportunity to testify in support of A.B. 29 [reading from prepared statement, [Exhibit E](#)]. As Director Brown indicated, I have been with GOED since its inception, and before that my title was Director of Technology Commercialization, so it is very closely tied to the Knowledge Account. I would like to give you an overview of the proposed changes to the current Knowledge Account reform bill contained in A.B. 29. The proposed changes can be grouped into the following four categories:

1. Renaming the Knowledge Account to the Nevada Innovation Account, to reflect broadening of focus of the program. The Knowledge Account in its current form represents the most suitable instrument to the conditions that reflect the structure of Nevada's innovation economy that had been present in 2011 at the time of the enactment of the Knowledge Account. It remained the most suitable instrument during the subsequent years, as you heard from the universities individually. They represented the great return on investment we have seen so far. What they have also indicated is that in the meantime, Nevada's innovation economy has gathered momentum with the propagation and attraction of start-ups, entrepreneurs,

entrepreneurial support organizations, and innovation centers within and from outside the state. The renaming of the Knowledge Account to the Nevada Innovation Account will reflect this evolutionary process and will be the next step in the development trajectory of Nevada's innovation systems.

2. Establishment of a competitive grant program, is the language in the bill—we can go into depth later on that—to replace the allocation language that is currently in the bill that gives the Executive Director of GOED the power to allocate to any of the three institutions' individual projects, and that will be replaced with what we call a "competitive grant program." It is not intended to spur competition among the universities, although that is a side effect, but is the consequence of expanding the eligibility beyond the three research institutions.
3. Updating the definitions of commercialization revenue in order to reflect the increased university engagement with the start-up community and technology-based businesses.
4. Revision of the technology outreach program. I will take a step back historically and explain what the rationale was originally for the inclusion of the technology outreach program section in the original Knowledge Account statute. As Director Brown already alluded to, the Knowledge Account took a lot of ideas from the USTAR program in Utah. At that time USTAR set up Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) centers that were positioned strategically across the state of Utah to provide support for small tech-based businesses which were encouraged to apply for SBIR or STTR programs, also called the "nation's seed fund," which is run by participating federal agencies.

That is where the technology outreach program rationale currently in statute comes from. We are proposing to broaden that section and add four additional areas. One area will be mentorship, networking, and entrepreneurial training to assist start-ups and small tech-based businesses. The second area will be providing support and assessing the potential of the universities to bring new technologies to market. The third elaborates on the SBIR and STTR to establish a SBIR and STTR matching program. Such programs do exist in many states and have been in existence for quite a while, but most prominently in North Carolina. Their program dates back to 2005. Our program would match up to \$100,000 of the SBIR Phase I award which a technology start-up would obtain from federal agencies. That would be paid out in two stages and linked to the Phase 1 success. Finally, in this proposed language is the establishment of an independent market access entity (IMAE). The IMAE would be an entity with board representation by the three research universities, and would build upon the basic technology transfer offices' work and focus, for example, on the creation of spinout companies, their structure, structuring the appropriate capital table of such spinout companies, which is extremely important because it would give seed and metric capital investors clarity. It would help with identifying and hiring a chief executive officer (CEO) who would lead the spinout and fundraise for the spinout, and would assist with the

applications to accelerators nationwide, which is very important as we are discovering more and more when we talk to start-ups. That concludes my summary of the proposed changes in A.B. 29. I am happy to answer any questions you may have.

Assemblyman Miller:

My question is in the area of the expanded reach of the program. Director Brown mentioned this is not connected to the proposed Innovation Zone, so you cleared that up for me, but what I am curious about is if that Innovation Zone were to exist, would these start-ups that are associated with that be able to access support from the grants within this program?

Michael Brown:

Nevada is becoming a place for these very small one- to two-person start-up companies, the kinds that would start in a garage—seed companies—on the verge of trying to seek public capital for their projects. Today I tweeted that someone had done an analysis of the states and said Nevada and Florida were great places for start-up companies and gave us credit for this area. The intention is really these very small microbusinesses that are attempting to partner with academic institutions and get their start. Mr. Heise has experience in this area, as I am sure many of our folks here have much more experience than I, coming from an off-line industry. I would defer to Mr. Heise and our subject matter experts.

Karsten Heise:

Innovation Zones and Innovation Districts cannot thrive without start-ups, without educational research institutions. They are part of the assets that form innovation systems. With encouragements we are giving through the reformed Knowledge Account, the Nevada Innovation Account, to especially help the very early-stage companies, companies that probably have far fewer than 50 employees, have less than \$1 million in revenue, have probably raised less than \$10 million in capital—very early stage—they are encouraged to work with the universities to solve their technology problems. That would be open to any company in the state.

Chair Cohen:

There was mention made of this being about small businesses, but the definition of "private entity" in section 1, subsection 2 does not mention small businesses. Is that going to be part of the amendment, clearing that up, that this is geared towards small businesses?

Michael Brown:

The intention originally was to do that in the grant-making process, to define that. If the Committee wishes, we can narrow that and place it into legislation specifically. Unfortunately, there are multiple definitions of what constitutes a small business. For example, for the purpose of the PETS [Pandemic Emergency Technical Support] Grant Program State Treasurer Zach Conine and I used, we did not use the federal definition. We used the 50 employees and under. If the Committee wishes, we can work on language that would define that. The original intention was to develop it as part of the grant process. I will let Mr. Heise add to that.

Karsten Heise:

There is not much to add. You have summed it up. I would just caution when you define it, once it is in the bill and it is part of the legislation, it will stay there for a long time. If you restrict that specificity to, say, the number of employees, that would probably be lasting. If you get into detail and classify it with, for example, annual revenue or capital raised, that could change over time and then it would get tricky. I am just throwing that out as a word of caution. Certainly, as Director Brown said, we are happy to amend it for the [unintelligible] for example, as far as employees are concerned.

Assemblywoman Benitez-Thompson:

My question is on section 3, beginning on line 27—Any commercialization revenue received by the Office pursuant to such an agreement must be deposited into this new account created by NRS, and then the new language is, "except that any commercialization revenue received in the form of stock . . ." goes to the nonprofit. I have two questions. When you refer to the nonprofit, is that the Battle Born Venture nonprofit or will there be a new one? It is the Battle Born Venture. I see a head nod. My next question is when we go down to the definition of commercialization revenues, in the testimony we heard a great example of Gatorade and the state of Florida. Going back to 2011, I recall we had a conversation and that same example was shared with us in this Committee contemplating this legislation. I will bring up a point now that we talked about then, which was the State of Florida did retain royalty fees, so their general fund received money back from these investments. I did a quick Internet search, but it was about 20 percent of the cut of royalty fees and \$150 million into general fund over the years.

One thing I have always looked for and I still look for, especially as we are looking at the program and where it has been over the years, is that direct connection to how economic development grows the General Fund. But for dollars landing in our General Fund, we do not have dollars to appropriate education, or back to the universities, or to health and human services. Was there contemplation about removing this language about the royalty fees and allowing the state to find a way to have a more reciprocal relationship, so it is not just an outward flow of General Fund dollars through appropriations, but there could be an inward flow of dollars as well?

Michael Brown:

I will defer to Mr. Heise on that particular provision, and we have some of our NSHE friends still with us who could address that. I see Dr. Gautam has his hand up.

Mridul Gautam:

I came here in October 2013 from West Virginia. There was no way that university faculty, when they develop a technology, they can either license it or outright sell it. They get royalties on it or they get equity. Usually, nowadays, you get equity when the company becomes big and gets sold—there is a windfall. The universities in this state cannot hold equity, which means we cannot negotiate. The whole swath of negotiation on technology was impossible.

So when I came in 2013, we had done this earlier, we started at Nevada Research Innovation Corporation. It took three years to happen; there was a new concept. So today we have a 501(c)(3), which is separately located. It is a supporting organization under the 501(c)(3), and we can now assign technologies to this corporation, and that corporation can now either license technologies or equity; it can do anything. Equity is a major component. That is one big thing on the transaction side. The other was the culture. The other was the ecosystem. There was no ecosystem existing. You could have a faculty member who goes out and looks for early-stage seed funding, which was what they need, and then we can help them develop a technology and they can get to the point where somebody likes it, but a thing on a research bench has no value. Somebody has to develop that. That means you have to have a buyer, a CEO who comes in, who manages his faculty members. You have people like me. We know how to turn screws and write equations. Do not trust me to develop a company. I need somebody with a business sense. Those are the kinds of things which did not exist.

The Knowledge Account had no seed fund. In the past five years in Reno, we have innovation funds that fund little companies with one or two people, that go up to 15 to 20. So the ecosystem was not there. The Knowledge Account has created the ecosystem. Now people who come up with patents, we can mentor them. We can link them with investors, link them with CEOs, and link them to people who can market their technologies. I really thank the vision. Over the past six to ten years, we are to the point where Utah was 15 to 20 years ago. We are at the point where our faculty now wants to open companies. We have to tell them to calm down, we will get you a CEO, and we will get you the funding. That culture just was not there. We have an ecosystem now thanks to the Knowledge Account.

The question about royalties is only one part of it. I think there are several things that go on. Equity goes on. New companies coming to the region, that matters. They work with our people. They have spouses who work. It is an entire gamut of things that are happening that is creating \$108 million worth of venture capital and 490 jobs in new start-up companies which were not there earlier. That is economic development. Jobs and wealth. By wealth, I do not mean millions of dollars. By wealth I mean I can take care of my kids, I can take care of my kid's winter clothing. That is what I mean.

Assemblywoman Benitez-Thompson:

I appreciate that, and from my perspective as a legislator, it would mean that since the inception of this program, and so many of our economic development programs in 2011, we would be able to say a decade forward, here is the wealth the state has been able to accumulate from the investment in these programs and this is how our General Fund has grown from those. But we do not see growth in the General Fund; in fact, we see shrinkage of our state government, our inability to hire new employees, or having to keep positions vacant in the state of Nevada when the economy otherwise was going gangbusters.

As we think about these programs, I would love the consideration to know there is a conversation going on as to why not royalty fees, why not a way for Nevada to see, in a much more direct way, a much more direct legal nexus, the ability to really be a partner in this, in the way we would be a partner when we invest privately. I have a couple of other questions, but I am sensitive about the time so I will just stay with that on section 3.

Assemblywoman Anderson:

My first question has more to do with the grant and how exactly that is being considered. In section 2, subsection 5, it lines out exactly who can be part of the groups that are applying. Can a private business partner with one of our community colleges, in the idea of becoming innovative and allowing some of our other institutions under NSHE, also apply for these grants? My second question is who will be judging the grant awarding since it is a competitive grant?

Karsten Heise:

Prior to our meetings earlier this week, the answer to that would have been yes. Now the proposal is to amend the language for private entities, to link only to the section of the technology outreach program. If, for example, a community college would fall under those headers, then the answer would again be yes. The answer to the question of who would be judging it, is very similar to how we are currently evaluating proposals by the universities internally. At GOED, however, depending on the grant program, you want to bring in experts externally as well, as it would fit the grant program.

To give you an example of what other states are doing, some are actually outsourcing to true experts in the field nationwide, but then these are programs that are multi-tens of millions. So with the grant program, should this pass, we would immediately implement the SBR [strategic business reporting] mentoring program. And then I would bring in, in addition to academic experts in the technology area, experts from the private sector who help these start-ups, for example support organizations like StartUpNV.

Assemblywoman Anderson:

Thank you for that clarification. I am looking forward to reading the amendment because I think it is very important, in the idea of innovations, that we also look beyond simply the universities and DRI for ways for us to partner in our community colleges.

Assemblyman O'Neill:

I support Assemblywoman Benitez-Thompson's comment that the universities should receive some benefits in royalties on these programs we set up, and we should always remember our community colleges because they really develop jobs for Nevada and business on the blue-collar level. I am confused, though, as I heard you say this will not go to businesses in the Innovation Zone that is being discussed, but then I heard Mr. say those businesses could qualify, which is one point I need clarified. You also talked about 20 percent, the amendment coming, and as I read in section 4, on several levels it says that a private entity alone could qualify for this money without partnering with the university at all. Should university funds go to support private entities or should the university be the leadership, then

if they want to partner, they can partner with a private company. The university should come first, not the entity. It reads in section 4, subsections 3 and 4, "a private entity, or." It is the "or" that bothers me. So the two parts are to clarify about companies in the discussed Innovation Zone and then that one part about "or."

Michael Brown:

This was developed separate from the discussions on the Innovation Zone, so even though the word "innovation" is used in both, they are two separate initiatives and there has not been a nexus. However, if the Innovation Zone would come to pass, you start to build an innovation entrepreneurial economy there, and you have companies that meet the criteria to participate in something like this, then yes, they would be eligible. But there is no direct linkage between the proposed Innovation Zone and the proposed update of the Knowledge Account through A.B. 29.

Assemblyman O'Neill:

Thank you for that clarification. How about the second part, on the private entities alone?

Michael Brown:

Innovation is something that is constantly moving and constantly changing. I will let Mr. Heise address the thinking in this area, but certainly I know we are seeing a whole host of very small start-ups come to Nevada, attempting to make this their home. I will let Mr. Heise address that.

Karsten Heise:

Let me take one step back. Prior to the discussions we had with the research institutions this week, that is the language Assemblyman O'Neill is currently referring to, where it says, "private entity, or" and then it lists the other options. At that time, the intent was if there is an early-stage, technology-based start-up that needs help with prototyping, that needs help with validation of their technologies, to build the minimal viable product, to help with testing in labs for example, that in specific technology areas that we want to [unintelligible] stay in this state, they would become eligible. This was never intended to be corporate welfare for large corporations. It was only for these really tiny start-ups.

This week we agreed with the universities to change that language, which you see in the section line 10 [section 2, subsection 4, paragraph (c), subparagraph (3), sub-subparagraph (II)], where it says "private entities; or" to private entities as described in the technology outreach program section of this bill. In this section the only private entities left would be, for example, entrepreneurial support organizations that provide mentorship or entrepreneurial training or that would work with the universities to identify technologies and take them to market, or within the SBIR matching program it would be eligible—a private company—that got awarded a Phase 1 SBIR grant from the federal government and we would match up to \$100,000. Now, usually—that is the requirement of an SBIR grant—these technology companies have to work with faculty members at universities. The chances are that these faculty members are at one of the three research institutions, but not necessarily because there are companies in this state and coming to the state that work with principal

investigators, for example at Ohio State University; at the University of California, San Diego; at MIT [Massachusetts Institute of Technology]. We still want them to be included, as we have an interest to help these start-ups grow. That is the only exception here, where it would go directly and 100 percent to a private company.

Assemblyman O'Neill:

I appreciate your response, but I would feel much more comfortable if we said "and" instead of "or." It leaves too much for future interpretation outside of 2021. I would like the universities, the colleges, their money, to be included for them.

Chair Cohen:

I have some questions but will wait to see the amendment. They might be taken care of in the amendment.

Assemblywoman Kasama:

I agree with Mr. Heise. I think if you put too much detail into the statute, it would make it difficult to be flexible enough. I thought keeping it in the regulations for the grant program made sense.

Assemblyman Miller:

In regard to the grant programs and their diversity, are there any diversity requirements or diversity markers that give more diverse start-ups or more diverse entities a higher priority?

Michael Brown:

I do not believe there are, but that is something we need to take a look at. I do not know how the National Science Foundation and some of the federal agencies do these things, but let us take a look. This input has been exceptionally helpful. When you are updating something after ten years, it is really helpful to have all these eyes looking at it. Let us take a look, and I will ask my colleagues, as maybe this is something I do not know about this world.

Bo Bernhard:

I can attest once more, at Black Fire Innovation hub, which now exists because of the Knowledge Account, we have leveraged that into expanding the Leaderverse Initiative bill [Senate Bill 501 of the 80th Session], which successfully passed last legislative session and which explicitly seeks to expand the leaderverse of inventors, of business leaders, in a way that is more meaningful than anything I get to work with at UNLV. We do programs such as Battle Born Girls Innovate, which goes into the junior high schools and creates robotics programs; our Young Executive Scholars Hospitality and Tourism Program is a Las Vegas-sized Upward Bound program; and our university-based programs, taking advantage of them, leveraging our status as, according to *U.S. News and World Report*, the second most diverse campus in the nation, has just been an inspiring success that now lives at Black Fire Innovation. Assemblyman Miller, we share your interest in this and support it through Black Fire.

Assemblyman Miller:

I would love to see more in the amendment that actually deals with diversity when it comes to the granting process.

Mridul Gautam:

We do have programs, such as the InNEVenture Fund, which got resources from the Knowledge Account. A lot of that money went to minorities and women. It is a proof-of-concept, the only proof-of-concept fund in Nevada. It was quite successful but ran out of money. During the last year we have had several series such as the Black Business Forum on August 5, 2020. There was alternate financing for start-ups, most of the panel were from the BIPOC [Black, Indigenous, and people of color] community; and the future of e-commerce, which was an all-women CEO panel, by the way.

We have focused on socially responsible investments in our seed funding. The thing about these small funds is they have gotten to the point where they can give you royalties. So we get equity. We have equity in these companies; if they were to grow big and sell, then money will go back to the state. But right now in this region in the state, the ecosystem is such that they are still developing and the companies are not mature enough to be sold or to sell their products to bring in the resources. Yes, our goal is to help across the board BIPOC communities, school [unintelligible] generation, low income, provide them with resources and opportunities, more importantly.

Chair Cohen:

We will need to recess for floor in a few minutes, but let us see if we can get those in support of A.B. 29 taken care of. Director Brown, is that everyone you have to speak?

Michael Brown:

This has been an exceptionally helpful Committee hearing. We have gotten a lot of very good ideas. What I would like to do is go back with my team and our NSHE partners and discuss some of the issues raised. We will work on an amendment to bring forward for the Committee to consider.

Assemblywoman Benitez-Thompson:

I had one technical clarification I wanted to make sure I understood. In section 1, subsection 4, the technology readiness level. It looks like it is going to be tiered because I see a reference to a level 3 later in section 2 [section 2, subsection 4, paragraph (c), subparagraph (1) sub-subparagraph (II)]. Would those be akin to the levels we see with the Battle Born Venture nonprofit, and how they use a typology to reference different businesses, or would a new framework be set up for this?

Karsten Heise:

This is actually the federal government's tier. It originally comes out of NASA [National Aeronautics and Space Administration]. They are tiering, running from 1 to 9. Level 3 is about the prototyping stage where you demonstrate the validity of a technology within a lab but not yet outside the lab. The rationale for this was to get the technologies closer to market. This is why we put in projects with technology readiness levels 3, 4, to be funded at the universities.

Assemblywoman Benitez-Thompson:

So you are referencing the federal government. I thought you said NASA, but that is a different program than the federal research and development tax credit program that exists. I should not confuse those two. Is that right?

Karsten Heise:

They are different. The National Aeronautics and Space Administration originally instituted the technology readiness levels. Others have adopted it. They are now adopted worldwide. They run from 1 to 9.

Chair Cohen:

We will now hear from those in support of A.B. 29. We are limiting testimony to two minutes. Unfortunately, because of our 120-day session sometimes we have to jump in and out of things, so we will be going to floor in a few minutes. We will try to hear as much testimony in support as we can. We will be back after floor for the remainder of support, opposition, and neutral, and for public comment.

Jeffrey Saling, Co-Founder and Executive Director, StartUpNV:

StartUpNV is a nonprofit statewide business incubator and start-up accelerator. We are deeply engaged, on a daily basis, in the start-up ecosystem throughout the state. I also happen to teach Engineering 461 High Tech Entrepreneurship at UNR. It is a class where we use university case studies to inspire engineering students to create and build start-ups from university-developed technologies, as well as technologies and ideas they develop on their own.

The main assignment in the class is to go to the UNR IP [intellectual property] catalog, find a technology worthy of creating a business, create the business, and pitch it to local investors. It is inspiring to work with entrepreneurs throughout the state, building their businesses and helping them raise capital to grow, and to work with our university students to develop their ideas, the university IPs, and the businesses.

It is with this combined private and personal university experience that I offer my support of A.B. 29. I believe GOED should have the flexibility to invest in both university and privately developed IP that can become successful businesses, grow, raise additional capital, and return multiples on that capital, as you have all talked about. Director Brown and his

colleagues have the exposure and the wisdom to make good decisions about not only what to invest in but at what stage, because having the idea or developing the technology is only the first step.

Investment is needed in the steps that follow to develop that tech into a real business, and those stages require investment too. Some of that investment will be through our university system and some will be outside of that, in the private organizations. The Office of Economic Development, Office of the Governor is uniquely positioned to make those calls and should have the flexibility and authority to make those investment decisions that will have the best returns on capital, with transparency and oversight from this body and others. I believe A.B. 29 will provide that, which is why I support it [[Exhibit F](#)].

Kathy Flanagan, Senior Management Analyst, Southern Nevada Water Authority:

I represent the Southern Nevada Water Authority and we are in support of this bill. It is programs like the Knowledge Account that helped launch important innovations such as the WaterStart program.

Joshua Leavitt, Chair, Society for Information Management Las Vegas Chapter:

I am representing the Society for Information Management Las Vegas Chapter (SIMLV). We are an organization of technology executives, industry leaders, educators, and entrepreneurs throughout southern Nevada [reading from prepared testimony, [Exhibit G](#)]. In addition to providing an exchange of ideas, we strive to provide advocacy for important issues and bring a wide range of strategic forecasting and technology expertise to serve the state of Nevada. Encouraging entrepreneurship and creating new means to support start-ups and bring new technologies to the market is an investment in Nevada's economic diversification and a growth of STEM [science, technology, engineering, and mathematics] and creative workforces.

The Society for Information Management Las Vegas Chapter highly supports A.B. 29. We believe the bill will evolve the purpose of the Knowledge Account to better align and support local entrepreneur ecosystems by providing further means for inspiring entrepreneurs to work with research institutes, to create and patent intellectual property, raise capital, recruit talent, design scalability, and bring products to market. We applaud the transition to a competitive grant program and the inclusion of private entities as eligible recipients, believing it will further spur innovation and diversity, and foster the next generation of entrepreneurs in Nevada—and Nevada needs more active entrepreneurs.

As many of today's speakers have demonstrated, entrepreneurs are fantastic partners for businesses, and large industries develop innovative ways to stay competitive in the global marketplace since entrepreneurs have a talent to turn technology into usable and marketable applications. On behalf of SIMLV, I thank you for the opportunity to testify in support of A.B. 29 and I am happy to answer any questions.

Chair Cohen:

At this time we are going to have to recess. Again, my apologies to anyone waiting and to the presenters. We will hopefully be back around 6:30 p.m. If you do not want to wait, please feel free to send in your testimony in writing and we will post it and make sure the Committee members see it. We are in recess [at 5:19 p.m.].

[Meeting reconvened at 6:28 p.m.] We will continue with testimony in support of Assembly Bill 29.

Jonas R. Peterson, President and Chief Executive Officer, Las Vegas Global Economic Alliance:

I want to share that the Las Vegas Global Economic Alliance is in full support of A.B. 29 and the renaming and rebranding of the Knowledge Account to the Nevada Innovation Account. As the regional development authority for southern Nevada, our mission is to grow the economy through economic diversification. Assembly Bill 29 will help us grow the innovation economy and I believe serve as a recruiting tool for start-ups, emerging industries, and tech incubation. The Knowledge Account has had so many highly successful examples; one in particular our team has been intimately involved with is WaterStart, which has helped solve some of our most challenging water issues, and has also helped us recruit new water-related companies throughout the state. It has been a great success and there are many more examples. I urge you to support A.B. 29 to help Nevada be at the forefront of innovation and technology to diversify the economy.

Anthony Ruiz, Senior Adviser for Government Relations and Community Affairs, Nevada State College:

The Nevada State College is in full support of A.B. 29 to help support Nevada's innovation economy. I would like to add that I appreciate the collaboration on this bill by Director Brown and his team at GOED.

Carlos Cardillo, Director, Nevada Center for Applied Research, University of Nevada, Reno:

My comment today is in favor of A.B. 29 because with investment from the Knowledge Account, The Nevada Center for Applied Research (NCAR) was created to support the development of companies, entrepreneurs, and jobs, and to nurture collaboration between industry, higher education, and government. The Nevada Center for Applied Research serves as a fulcrum for industry, allowing access to university resources and helping industry to establish collaborative relationships that promote innovative research programs and scientific studies to address real-world problems, also to connect industry partners with governmental agencies to promote pilot programs and initiatives; facilitate access to specialized labs and equipment; build teams of faculty, scientists, doctoral students, and graduate students to work on complex development; and also provide access to support resources such as mentoring and interns.

Here are some of the key performance indicators that you heard already, but I would like to repeat some of them. Since November 2015, with the support of the Knowledge Account, NCAR has brought more than \$25 million in service, sponsored research, and donations back to the university and the community. Currently 29 companies have operations based at the university facilities. More than 490 jobs have been created by those affiliated companies. Close to \$110 million in capital was raised by those companies. Besides the return that I am presenting, I believe it is clear that the Knowledge Account has produced an impact in the region through research, development, and innovation. Your continued support of the Knowledge Account will continue to make a difference for Nevada.

Nathan Allen, Executive Director, WaterStart:

I am here to speak in support of the provision of A.B. 29 that would continue to fund and make changes to the Knowledge Account. WaterStart is a nonprofit organization that was initially founded through a partnership between the Southern Nevada Water Authority, the Desert Research Institute, and GOED. We received our start-up funds in 2015 with a Knowledge Account grant to DRI which acted as a parent company. With this support our membership quickly grew to include the largest water agencies and consumers from across the state of Nevada. The funds we received from the Knowledge Account were used to develop an operating model and hire staff dedicated to benefiting Nevada's economy by attracting tech companies to the state that would invest and employ people, while also helping to address the state's water challenges with innovative solutions.

Today WaterStart has received just over \$4 million from the Knowledge Account. These funds have been directly matched with another \$3.4 million from our members and roughly \$1 million from additional grants we have received. The results from the program and the work WaterStart has done have delivered 34 pilot projects addressing needs around water innovation in the state. Eight of those partnerships were created between tech companies, universities, and DRI. We have attracted 16 of those tech companies to the state. They are projected to create 139 new jobs. Currently 21 people are employed by these companies as a result of this funding, contracting, then, an additional three local manufacturers in Henderson.

We are calling in today to support the changes to the Knowledge Account, to give GOED additional flexibility to support programs such as ours that are innovative and not only have a significant economic development impact, but also address significant challenges to water, which is another limiting factor in our economy. Last year we spun out of DRI because our membership has grown internationally to where we now deploy technologies that benefit more than 30 million people across three continents. We would like to continue to have Nevada economic development as a core part of our activity. As a private organization, being able to apply this legislation now, going forward, will allow us to continue to receive funds to continue to do this work in Nevada.

Chair Cohen:

We will hear from the next person in support. [There was no one.] We will move to callers in opposition. [There were none.] We will move on to neutral. [There was no one.] I want to remind anyone who is watching, who was unable to get through or watches this later, feel free to send in any comments as exhibits. In the meantime, Director Brown, would you like to make a closing statement?

Michael Brown:

Thank you for the opportunity today to present these wonderful experts and great leaders in Nevada. During the recess it occurred to me, the question was raised about community colleges. Mr. Heise leads our Knowledge Account at GOED and leads the efforts with the research universities. Stacey Bostwick, on our staff at GOED, leads the workforce innovation work with a separate fund, the WINN [Workforce Innovations for a New Nevada] fund, and works directly with the community colleges on partnership programs there. They kind of operate in tandem. Melody Rose, Chancellor of NSHE, has expanded the university presidents meeting to include the community college presidents and Stacey Bostwick, so we have a wholistic approach to this. I should have mentioned we basically have two programs serving two different target markets.

With respect to some of the suggestions that came forward, often when you are doing grant programs like this, you do it on a rating system and give points to various projects. One possibility I would like to explore over the weekend is, we could create a program where points would be provided for issues of diversity—issues of partnership directly with Nevada institutions—that would give those applications priority over others. I would like some time to talk with my NSHE partners about this so we can memorialize it for the record going forward.

On the issue of General Fund revenues, this is vexing for me. I was not engaged in these matters then. I looked back at 2013 and my predecessor, Mr. Steve Hill, was very circumspect when this program was launched. He was very cautious about this. He said it would take many years for these things to incubate and develop. From what I see in the legislative history, his focus was one of creating jobs and creating this innovative economy. At that same hearing, NSHE Chancellor Dan Klaich talked about tax revenues. From what I read, it would be tax revenues that would be produced from the innovation economy that you created, so it would be secondary. From the limited legislative history I was able to pull up, I do not find references where the intention was a commitment of a General Fund revenue, but I would love to learn more about that. This is just something where I do not have the knowledge.

In closing, I would like to consider the other suggestions made by the Committee and talk to NSHE and our partners over the weekend. Jim Humm, Michael Flores, and I will finish up the amendment and circle back to you, Madam Chair. Innovation is constantly moving.

When the Knowledge Account was created in 2011, the 26 percent of Americans who had a mobile phone, it was a Blackberry. So you can see how far and fast we have moved just since that era. I appreciate your time today. I think this program is something Nevada can have great pride in, and in the incredible academic leaders we have engaged in it.

[[Exhibit H](#), [Exhibit I](#), [Exhibit J](#), [Exhibit K](#), [Exhibit L](#), [Exhibit M](#), [Exhibit N](#), [Exhibit O](#), [Exhibit P](#), [Exhibit Q](#), and [Exhibit R](#) were submitted but not discussed and are included as exhibits for the hearing.]

Chair Cohen:

We look forward to seeing the amendment and how your work continues on this. I will close the hearing on A.B. 29 and open the meeting for public comment. Do we have anyone on the line for public comment? [There was no one.] Do the members of the Committee have any comments? [There were none.] Our next meeting will be Tuesday, March 9, 2021, at 4 p.m. I anticipate that we will have a work session. We are adjourned [at 6:43 p.m.].

RESPECTFULLY SUBMITTED:

Gina Hall
Committee Secretary

APPROVED BY:

Assemblywoman Lesley E. Cohen, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a written statement dated March 4, 2021, presented by Michael Brown, Executive Director, Office of Economic Development, Office of the Governor, regarding Assembly Bill 29.

[Exhibit D](#) is written testimony dated March 4, 2021, presented by Vic Etyemezian, Interim Vice President for Research, Desert Research Institute, regarding Assembly Bill 29.

[Exhibit E](#) is a written statement dated March 4, 2021, presented by Karsten Heise, Director of Strategic Programs, Office of Economic Development, Office of the Governor, regarding Assembly Bill 29.

[Exhibit F](#) is a letter dated February 22, 2021, to the Assembly Committee on Revenue, submitted by Jeffrey Saling, Co-Founder and Executive Director, StartUpNV, in support of Assembly Bill 29.

[Exhibit G](#) is a letter dated February 19, 2021, to Assemblywoman Leslie Cohen, Chair, Assembly Committee on Revenue, presented by Joshua Leavitt, Chair, Society for Information Management Las Vegas Chapter, in support of Assembly Bill 29.

[Exhibit H](#) is a copy of a PowerPoint presentation titled "Nevada Knowledge Fund, Nevada Innovation Fund," dated March 2021, submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor.

[Exhibit I](#) is a copy of a document titled "Innovation Based Economic Development," from the Office of Economic Development, Office of the Governor's 2020 Annual Report, submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, regarding Assembly Bill 29.

[Exhibit J](#) is a letter dated October 23, 2020, to Governor Steve Sisolak and Michael Brown, Director, Office of Economic Development, Office of the Governor, signed by Melody Rose, Ph.D., Chancellor, Nevada System of Higher Education; Kumud Acharya, Ph.D., President, Desert Research Institute; Brian Sandoval, President, University of Nevada, Reno; and Keith Whitfield, Ph.D., President, University of Nevada, Las Vegas, submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, regarding Assembly Bill 29.

[Exhibit K](#) is a document titled "University of Nevada, Reno: Knowledge Fund Investment," submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor.

[Exhibit L](#) is a document titled "UNLV: Knowledge Fund Investment," submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, regarding [Assembly Bill 29](#).

[Exhibit M](#) is a document titled "Desert Research Institute: Knowledge Fund Investment," submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, regarding [Assembly Bill 29](#).

[Exhibit N](#) is a collection of press releases from the Nevada Governor's Office of Economic Development, and Bioelectronica, submitted by James Humm, Director of Compliance and Regulatory Affairs, Office of Economic Development, Office of the Governor, consisting of the following:

1. "Tu Biomics, Agriculture Biotechnology Company spins out of DRI"
2. "DRI's WaterStart program GOED Knowledge Fund success story"
3. "GOED Knowledge Fund project at University of Nevada, Reno key to three company expansions and job creation"
4. "Knowledge Fund supports CoLab Esports Innovation Lab Project"
5. "GOED Knowledge Fund project will connect technology companies statewide to Small Business Innovation Research grants"
6. "Nevada Center for Applied Research (NCAR) graduate, Bioelectronica Corporation, applies new round of venture funding to expand hiring and innovation in digital biochemistry"

[Exhibit O](#) is a letter dated February 2, 2021, to the Assembly Committee on Revenue, submitted by Dan Berglund, President and CEO, State Science and Technology Institute, in support of [Assembly Bill 29](#).

[Exhibit P](#) is a copy of an email titled "[A.B. 20](#) / Comments," dated March 4, 2021, to Assembly Revenue Exhibits, submitted by Jonathan Hull, Ph.D., Co-Founder and CEO, Bioelectronica, regarding [Assembly Bill 29](#).

[Exhibit Q](#) is a copy of an email titled "Commenting in support of UNLV Blackfire," dated March 4, 2021, to the Assembly Committee on Revenue, submitted by Jeffrey Sweeney, Chairman and CEO, US Capital Global, in support of [Assembly Bill 29](#).

[Exhibit R](#) is a written statement dated March 4, 2021, to the Assembly Committee on Revenue, submitted by Mike Kazmierski, President and CEO, Economic Development Authority of Western Nevada, in support of [Assembly Bill 29](#).