

*** NOTICE OF PUBLIC MEETING ***

INFORMATION TECHNOLOGY ADVISORY BOARD

LOCATIONS:

Legislative Counsel Bureau 401 South Carson Street Room 2134 Carson City, Nevada 89701	Grant Sawyer Building 555 E. Washington Avenue Room 4412 Las Vegas, Nevada 89101
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DATE AND TIME: February 14, 2018, 1:00 p.m.

Below is an agenda of all items to be considered. Items on the agenda may be taken out of the order presented, items may be combined for consideration by the public body; and items may be pulled or removed from the agenda at any time at the discretion of the Chair.

MINUTES

1. CALL TO ORDER and ROLL CALL

Chairman Diflo: Good afternoon everybody. This is Paul Diflo. It looks like it's 1:04, so I'd like to call to order the February 14th, 2018 meeting of the State of Nevada Information Technology Advisory Board. Leslie, I'd like to ask you to do a roll call, and then let me know if we have a quorum.

Leslie Olson: Assemblyman Hambrick?

John Hambrick: Here.

Leslie Olson: Senator Denis?

Senator Denis: Here.

Leslie Olson: Chair Diflo?

Chairman Diflo: Here.

Leslie Olson: Director Cates?

Director Cates: Here.

Leslie Olson: Director Whitley? Director Malfabon?

Director Malfabon: Here.

Leslie Olson: Ms. Krause?

Catherine Krause: Here.

Leslie Olson: Mr. Betts? Ms. McGee?

Sherri McGee: Present.

Leslie Olson: Mr. Marcella? Chairman, we have a quorum.

Chairman Diflo: Thank you, Leslie. Before we get going on the Agenda, I've been asked to remind everybody about some mic etiquette topics. So, first of all, in order for the meeting to be broadcast with the best possible quality, please silence all cell phones and devices. Do that right now. And to speak, press the mic button at your seat. The button will light up so you know it is on. When speaking, adjust the mic so it's pointing directly at your mouth. Position yourself about six inches from the mic. If you have a soft voice, get closer. If your voice is loud, get farther away. Press the mic button again to mute the mic when you are done speaking, and please use only one mic at a time. Okay, thank you for your patience with that.

2. PUBLIC COMMENTS (*for discussion only*) – No action may be taken upon a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action may be taken. Public comments may be limited to 3 minutes per person at the discretion of the Chair. Comments will not be restricted based on viewpoint. The Chair may, at its discretion, hold this agenda item open in order to receive public comments under other agenda items.

Chairman Diflo: We will go to Agenda Item No. 2, which is Public Comments. We will start here in the North. Are there any public comments? If so, we ask you to step up to the table. Seeing none, we will go to the South. Are there any public comments in the South?

Senator Denis: Nobody is coming forward.

Chairman Diflo: Okay, we'll keep this Agenda Item open until we get down to No. 13, and then we'll close at that time.

3. COMMENTS BY THE CHAIR (*for discussion only*) – Chair, Paul Diflo.

Chairman Diflo: And that will take us to Agenda Item 3, which is Comments by the Chair. At the last meeting, we focused on the biennial budget, and in this meeting, you're going to see it's more focused on the strategic initiatives and IT security, which is appropriate based on the ITAB Charter. I want to take a quick opportunity to review the objective of the Nevada Information Technology Advisory Board, not only for the new membership sake, but also as a reminder for the rest of us.

The key purpose is to provide an arena for discussion for IT issues, a forum for the investigation of relevant technology. You may recall last year, we did an investigation around the net neutrality topic and to advise EITS on a variety of issues relating to information technology, including strategic planning appropriate to support the EITS mission of delivering service to state agencies. ITAB fosters an environment for partnerships that promotes IT performance excellence both fiscal

and functional. The focus will center around, but not limited to application sourcing, business continuity, and disaster recovery, information security, data management, end-user support, data centers and infrastructure, and in general, IT service delivery.

Given that stated objective, I'd like to propose that we include an ITAB endorsement agenda item based on the technology discussed at this meeting. So, for Agenda Items 7, 8, and 9, we can choose to endorse what's presented today or not, and I think we're safe there based on the comment that says these Agenda Items are for discussion and possible action. If you determine that we need more detailed information Director Cates can bring back at a future meeting, we can hold off on that endorsement or we can choose to endorse part of what's presented today.

4. INTRODUCTIONS AND WELCOME NEW MEMBERSHIP (*for discussion only*) – Chair, Paul Diflo.

Chairman Diflo: With that, I would like to go to Agenda Item No. 4 and welcome our new member to the ITAB Board. This is Assemblyman John Hambrick. Mr. Hambrick was appointed to replace Assemblyman Paul Anderson. So, welcome, Assemblyman John Hambrick.

John Hambrick: Thank you, Mr. Chair.

5. ELECTION OF ITAB CHAIR (*for possible action*)

Chairman Diflo: Agenda Item 5 is the Approval of the Minutes. This is from the last meeting on February 3rd, 2017. I'd like to ask for a motion to approve.

Senator Denis: So move, Mr. Chair.

Chairman Diflo: It looks like I missed Item 5, which is an Election of ITAB Chair, and so this is in the statutes. We have to have an annual election of a Chair. And so at this point, I guess I would ask if there are any nominations.

Patrick Cates: I have a nomination. I would like nominate Paul Diflo as Chair.

Director Malfabon: Second.

Chairman Diflo: Okay. All those in favor? [ayes around] All those opposed? With that, the motion is carried. I'm not sure if that's a good or bad thing. All right, well, that's what we're going to have.

6. APPROVAL OF MINUTES (*for discussion and possible action*) – Chair. Discussion and decision to approve minutes of the meeting on February 3, 2017.

Chairman Diflo: That will take us to the approval of the minutes. Can I get a motion to approve the minutes from the meeting on February 3rd, 2017?

Sherri McGee: For the record, Sherri McGee. I motion that we approve the minutes from the previous meeting.

Chairman Diflo: And can I get a second?

Catherine Krause: Second.

7. DEPUTY ADMINISTRATOR, EITS AND CISO INTRODUCTIONS – Patrick Cates, Director, Department of Administration.

Patrick Cates: Thank you, Mr. Chairman. We have some new additions to our leadership team at EITS. I want to introduce David Haws, who came to us as the Deputy Administrator several months ago. It's been quite a while now. And Bob Dehnhardt is the State CISO, and he has been with us for a few months as well, and I'm wondering if maybe both of you could come to the table and just say a little bit about yourself briefly so the people down south can see who you are.

David Haws: Good afternoon. My name is Dave Haws for the record, the Interim Administrator for EITS. I joined EITS in January, about a year ago. I came from the Department of Employment Training and Rehab, where I was also functioning as an IT Manager, essentially, there with them. My background, I've done a lot of IT consulting in the past. I spent 12 years with Price Waterhouse doing management consulting up and down the west coast, spent a little bit of time up in Alaska doing some consulting for the state of Alaska, went back to Sacramento, worked with a lot of state governments as a consultant, and that's what actually brought me here to Nevada. I came here, and a long time ago, we were doing a project for CIS. It was a contract project for CIS at the time. I loved the area, decided I didn't want to go back to California, and so here I am permanently and glad to be able to serve. Thank you.

Bob Dehnhardt: I'm Bob Dehnhardt, Chief Information Security Officer. I've been in this position since last May, so about nine months now. Prior to that, I was the Information Security Officer at the Division of Welfare and Supportive Services. I've got about 35 or so years' experience in IT at various levels. About 15 years or so of that is in the information security arena. Over the years, I've worked for the federal government, private sector, a large multinational advanced micro device, and then a privately held HR payroll and benefits outsourcer. I've kind of run the gamut on sizes of organizations to work for, and I found a home in information security. I love this work, because every day when I show up to the office, I have absolutely no clue as to what the day is going to turn out to be. It's different every time, and I love that challenge and the puzzles that need to be solved in doing that.

Patrick Cates: Thank you both. I just want to say that they both have very impressive resumes. They're both well-credentialed. I think this state is very fortunate to have them in a leadership role in IT for Nevada. Thank you both.

8. UPDATE AND STRATEGIC INITIATIVES (*for discussion and possible action*) - Patrick Cates, Director, Department of Administration.

Chairman Diflo: That will take us down to Agenda Item 8, and Director Cates again is going to give us an update on the Strategic Initiatives.

Patrick Cates: If you could take one of those and pass them down. Okay, thank you, Mr. Chairman, Members of the Committee. Wearing my Director of Administration hat I'll give you an update on some of the big initiatives and kind of important things that are going on at EITS. The first thing I want to address is some change in leadership and some reorganization in leadership for EITS. I believe all of the members received notice that I received Shannon Rahming's resignation about a week ago I guess it was, and we've done some reorganization, and I just want to kind of go through that with you a little bit. I have a three-page handout that I believe you should have down

there in the South as well. It's just some org charts. The first page is an overview org chart of the Department of Administration.

Assemblyman Hambrick: Mr. Cates, we do not have anything down here.

Patrick Cates: You do not?

Assemblyman Hambrick: We do not.

Patrick Cates: Okay.

Assemblyman Hambrick: Someone in the audience is walking up now.

Patrick Cates: Okay.

Assemblyman Hambrick: She's going to go back and get copies.

Patrick Cates: Okay, thank you.

Chairman Diflo: We'll give it a minute so that we can get you those copies.

Assemblyman Hambrick: Got them.

Patrick Cates: Okay. Thank you. For the record, Patrick Cates, Director of Administration. The first page is just a broad overview org chart of the Department of Administration, it shows all of the divisions within the Department of Administration, and you can see EITS, Enterprise IT Services, and I've highlighted as one of the divisions. On the second page, this is an org chart that represents the Office of the CIO as it was, basically, a month ago.

You have Governor Sandoval at the top and then myself, Director of Administration. I have a Deputy Director position that has been vacant, and I'll get to that in a moment, and then we have the EITS Administrator that Shannon Rahming has been in for a few years. That position also has been designated as the State CIO by the Governor. It's a separate statute that designates the CIO, traditionally. I don't think there's ever been an exception to this, but the EITS Administrator traditionally always has been the CIO. The CIO had basically most of the Office of the CIO under them directly. So, you had the Chief Assistant Planner, Chief of Research, Planning, and Grants, Cyber Counselor, the Deputy Administrator, David Haws, Administrative Support, and the State CISO as well as a Management Analyst position. And then under that, most of the operations of EITS, Communications, Computing, Agency IT services, which was under the Deputy Administrator.

I think in my observations, I've been in my position now for approaching three years. I don't think I've quite hit three years yet, and I think that it has been very difficult to have one person tend to the operational needs of Enterprise IT Services and really give that the due as well as providing the broader state CIO functions and roles, which I see as really one of setting strategy one of coordinating with other agencies and local governments. There's a lot of external out-of-state work that's done through NASIO, it takes up a tremendous amount of time, and I think it's been a real struggle to have one person do both of those duties.

The Deputy Director position was occupied by Leann Easton for quite a while. She was the administrator for Human Resources, and I promoted her into the Deputy position. She did a fabulous job. She took care of most of those divisions that you saw on the first page. I personally

was involved with EITS and Purchasing and Public Works and some of those divisions, and she kind of kept the other pieces running. And Leann is a great asset. When we launched the Smart 21 project, which is the state's ERP project to replace the state ERP, we stood up a project office, and I'll go into that with a little bit more detail later, and I recommended her to be the Executive Director for that project. That's how the position became vacant.

So, because it was vacant and because I was struggling how to really fill out that state CIO EITS Administrator position, in consultation with the Governor's Office, we decided to go ahead and recruit the Deputy Director as the State CIO so that the Administrator position could be more of an Operational Manager of Enterprise IT Services. If you go to the next slide, this is kind of where we're at today. We start with the Governor always and then the Director of Administration, and then the Deputy Director State CIO. I will tell you that we have selected a candidate for that job. That person will not start until April 2nd. That person has not notified their employer yet, and I can't make public who they are. I will say they come from the private sector. They have a broad and deep set of experiences that I think will be an asset to the State, and as soon as I am able to divulge who that person is, I'll be happy to do that.

For now, in the absence of having that person on board, I'm doing my best to fulfill the State CIO role in the interim, and then David Haws has agreed to serve as the interim administrator for EITS. So, I have appointed him to that on an interim basis, and then when the new State CIO comes in, we'll see what we want to do permanently there. Very grateful for David for stepping up and doing that. So, he gets to do two jobs, and I get to do a job and a—I guess that's two jobs as well. We both get to do two jobs for a while, and in doing this, part of what I had envisioned was realigning duties a little bit to make sure the EITS Administrator was really focused on the internal operations of EITS. So, you can see some chain of command changing here so that the Deputy Administrator State CIO would supervise the EITS Administrator, but also have as a direct report the State CISO as well as the Cyber Counselor, Chief of Research, Planning and Grants, and Chief Assistant Planner. Those three people are the core of what we hope will evolve into really a strategy policy group. That's kind of where we're at right now as far as the organization. I have several other things I want to cover. Does anybody have any questions about that? Doesn't look like it. Okay.

There's a lot of big strategy things going on that are in the works currently or that we're planning. I have a pretty big list of things here. It might be a lot of information all at once. I'm happy to come back in future meetings with more detail on some of these, but definitely want to inform you and want to get reaction to some of these things. And I know that the Chair was talking about budgets, so I'll start with that, because we are entering the beginning of budget building for the next legislative session. There is a budget kickoff meeting for all agencies on February 27th. That begins the long journey to building a budget. Essentially, the deadlines for budget building, we're already working with our agencies within the Department on building budget concepts. These would be new budget initiatives, major initiatives that we need to include in our requests. We're starting that now. We're having conversations and making lists of what some of those initiatives will be, and I'll touch on that a little bit as it relates to EITS.

I'm basically intending that our team spend the next couple of months in flushing out those budget concepts and sharing them with the Governor's Office. It's a little unclear to me, the approach that they're going to take this budget cycle. Because this is the Governor's last term, I don't think they're going to emphasize the sort of vetting and approval of budget initiatives as much as they have in the past. For instance, last session, we had a deadline for budget concepts that we had to present to the Governor's Office, and they would tell us yes or no or whether to proceed. What I'm hearing, they may not do that as much, and they may allow agencies to submit—I wouldn't say whatever they want, but just submit things, and my understanding of the plan is that they will prepare a flat budget, and anything over and above that will be developed as what they call items for special

consideration. So, these are discreet budget decision units that could be rolled into the budget if the next Governor so chooses. I think every agency is going to have a flat budget and then these lists of things they want to do, and after the elections, they'll have to make a pitch to the new Governor and see if they can get him to support those things.

Bill draft requests, those will be due in April. Again, we'll have the exact timelines after the budget kickoff meeting, but bill draft requests, any legislative changes are typically due in April. Just a little bit of the flow, we'll go through a grind as an agency in preparing these budgets, and they're basically due to the budget office at the end of August. Department of Administration has to get a lot of their stuff done earlier than that, because Department of Administration has a lot of internal service funds. So, every time we change our budget, it has this cascading effect to all the other state budgets, and that can be very disruptive if we're making changes late in the process. So, our budgets will finish up earlier than that.

Last session, some of our really big initiatives were Bigger Pipes. That was just to increase connectivity and bandwidth throughout SilverNet. Cyber security was another big initiative. That was a variety of things, tools, software, staff, and also Office 365. I just want to let you know that all three of those are proceeding. We made quite a few purchases and brought people on board related to both the Bigger Pipes and cyber security. Office 365 is progressing. It's been a little slower going than we had hoped. My understanding last report is there should be thousands of DHHS employees that they're standing up with email. I think they're in the process of doing that right now.

When we budgeted for Office 365, what EITS originally proposed, I think, was something like five or six positions to help with that, and that wasn't supported by the Governor's Office. They thought that was a little too much. So, we went back and skinned it down to three positions, and I'm unclear of how it came out the end of the sausage factory this way, but what actually came out in the Governor's budget was three positions, but two of them don't start until October of this year. So, here we are going full bore trying to stand this up with not a lot of people to help. We've been working mostly with DHHS. They've been a great partner, and they do have resources. That has been helping, but it's put us a little bit behind. I've instructed Administrative Services Division, who does all the fiscal services, to take a look at EITS budgets and see if we can make a request to start those positions sooner, because we really need to get that project off the ground.

I mentioned that specifically, Office 365 and Bigger Pipes; because I anticipate that we will be doing another budget request for the next biennial budget for both Bigger Pipes and Office 365. The proposal that was approved by the legislature related to Office 365 is that the State would bring statewide implementation of Office 365, a single tenant, all agencies on this tenant, and we actually negotiated an agreement with Microsoft for a statewide implementation. We have—I think it's four years to bring everyone up on Office 365. So, we're committed. We're committed by contract. I wouldn't say we're the only state to do a statewide agreement like that, but we might be. I don't think there's a lot of states that have done that. I can tell you I think because we were able to offer all of the State's business, we were able to negotiate, I think, very good pricing. I think, basically, the whole state got pricing that NDOT had originally got, because NDOT was one of the first agencies to go to 365, and so at that point, Microsoft gave them a very good deal. But without being able to offer the entire business of the State, they weren't going to give us a very good deal. They were going to be, like, \$200 a license, and I think the basic license that we negotiated, if I remember, the number is \$144.

Also in that agreement, it is set up to be available to local governments as well. That was very important to us. That's something that's been very important to me as a Director and to Jeff Haag as the Chief of the Purchasing Division to make sure these types of agreements have clauses in them

that allow a local government to use those agreements with that kind of pricing. So, I'm pretty happy with that, but in the next session, we need to budget to make sure that every agency can get on 365. We just went with the agencies that already had the funding for it, maybe were partially there, and it takes time to bring them all over and put them on a single tenant. But, the idea is that by the end of next biennium, we'll have brought every single agency on board, and the licensing fee will just be part of the EITS assessment for email and productivity. So, I'm very excited about that. That's a big initiative. It's going, and we're going to be doing more in the next session, assuming the legislature approves that, and the same with the Bigger Pipes.

There's a large list of network equipment and agreements with telecom companies to just generally increase bandwidth for the state. The justification for that, in part, was to facilitate more Cloud computing initiatives to make sure that our system was robust enough to really put things in the Cloud. We're taking a look at what else we need along those lines. So, I anticipate we'll have some budget requests related to that. One of the things in particular on Bigger Pipes that we've been talking about internally is what we can propose to really address that last-mile connectivity in rural areas that's been a vexing problem for years. Corrections is an example of a department that really struggles in that area, and to date, we haven't really been able to find good solutions. But, I think there are opportunities there to coordinate with them and to make some investments and to bring in some of the private sector players. Switch, for instance, has really made quite an impact on the state in its network infrastructure, and I know they're interested in helping in that area. So, we're really trying to get our head around what can really be impactful, because we really can't be successful with these Cloud projects if we can't have every state agency connecting with high-speed access.

The investments we made last session were very important, and really helped, because we hadn't invested in SilverNet really much at all since the great recession, but we need to do more. It doesn't address everything. And along those lines, talking about Cloud computing, there is an initiative that we are working on right now, and that is to develop a Nevada statewide Cloud strategy. Some states have made policy statements that it's the policy of their state to have a Cloud-first policy. So, whenever you are considering new applications, your bias is, is that you want a Cloud-based product that you don't have to maintain the hardware for and that sort of thing. A lot of reasons for that is the industry changes and technology changes. I won't go into that. I'm hoping most of the group is familiar with those arguments. And we have agencies that are engaging in Cloud initiatives, but what we don't have is a real coordinated set of guidelines and principles, and without that, what we'll end up with is a lot of silos and a lot of people using a lot of different platforms. And one of the important things that we have to address with a statewide Cloud strategy is ensuring the cyber security.

If a small agency puts something in a Cloud with a vendor, there has to be some process to vet that before they do that so that we have assurances so that there are things in their contracts about cyber security, that the office of information security has some way to vet that and monitor that. I think it's one of the real compelling reasons. So, it's that and sort of the duplication of effort on and agency-by-agency basis why I think that we need a statewide Cloud strategy. I actually have a proposal from Gartner Consulting to help us with that. They are offering to come in with a team and help us develop guidelines in how you evaluate systems and applications and you make a decision about where you put things. That would also include an evaluation of all the state's major data centers and what applications are in those centers and what their readiness is to go to the Cloud. And of course, the Cloud means a lot of things.

There's a lot of flavors of that, everything from SaaS to just a hosted environment and things in between, and so they would help develop a policy and guidelines that would govern how agencies would approach that. And then another stream of work is that they would work with one agency specifically to evaluate all of their technology, their applications, and develop a path for them to go

towards the Cloud. The agency that we've been talking to about doing that is the Department of Motor Vehicles. I had a very good meeting last week with the Director, Terri Albertson. She's very interested in this. I do believe that we can come up with the funding to do this project this biennium, and what I hope that we'll be able to do is complete that this biennium. And then in our next budget cycle, we'll include that deeper review of other agencies and just kind of work through that.

I think it's really important we recently completed a contract with Switch to get into the Reno-Tahoe Industrial Center, the Citadel campus for Switch. We've been doing business with Switch down in southern Nevada for quite a while. The initial goal of that contract was for EITS to put some network equipment in there to help with connectivity at SilverNet. We're also looking at putting applications in there, and the contract is open to other state agencies. We put a contract in place, but we haven't put out any policy announcements about it or any kind of guidelines about how agencies could approach that, and we really need to figure that out and have a good strategy. And of course, Switch is—you know, I mean, it's a—I don't really think of that as Cloud. We're just outsourcing our data center. They're providing a building and power, and what have you, but we're still putting our own equipment in cages and maintaining it. To me, that isn't any different to have EITS go to Switch than it would be for HHS to put servers in the EITS facility, for instance.

I do think there is a good opportunity to deepen the partnership with Switch and use them more, but we need to be very methodical and kind of develop the strategy and think about what makes the most sense to go where. Switch has been a good partner. They've been very encouraging. They've done some analysis of the State's telecommunication bills. They believe if they were in a position to broker those agreements for us, that they could save the State significant amounts of money. I believe they threw the figure of 20% reduction in rates out there. That was after they analyzed it. I think that's probably a pretty good number, but they're really asking us, in exchange for that, to really consider deepening our relationship and to consider closing the State data center and relocating everything to Switch.

I think that's a lot easier said than done. I'm definitely interested in the discussion. You know, the city of Henderson, a while ago, basically closed their data center and moved everything to Switch, so I think it's possible. But, we have so many agencies and so many different applications at the facility that I think it requires this statewide Cloud strategy to really evaluate those applications, and I don't think we're going to be closing the facility anytime soon, but we've got to kind of work through a path of how to do that. You know, the State went through a data center consolidation effort. I forget how long ago it's been, maybe eight years ago, ten years ago, and that's when DHHS brought a lot of their servers into the EITS facility. And I think that was successful, but we still have multiple data centers. We still have large agencies that have their own data centers. NDOT has a data center, and I think it was a few years ago that you guys made some investments in the data center and dropped—I think I heard it was like \$3 million to upgrade that.

Our data center, we currently have an advanced planning project to replace the HVAC system. We had a chiller go out last year, and I know that's going to be an expensive project, and, you know, we didn't have something like Switch and these companies right in our backyard when those things were built. And I think now is the time to really think thoughtfully and evaluate whether we go through another wave of consolidation or come up with a plan that would say, you know, we're going to work towards either moving our servers to someplace like Switch or that we're going to identify when these applications get upgraded. It's our preference that they be in the Cloud, something like that. I think there's an opportunity to start that now in this biennium and carry that forward through the next biennium. So, I'm very interested in that.

Getting back to the budget kickoff, part of the budgeting process is the technology investment requests, the TIRs. TIRs are specifically needed for the budgeting process. If agencies have any IT project over \$50,000, they're supposed to submit a TIR to EITS, and as part of the budgeting process, the IT Strategic Planning Committee considers projects that have a value of \$500,000 or over. And they meet, typically, once every two years in the budget cycle and review those projects and rank them. I've been involved with the IT Strategic Planning Committee for a number of years, and it, for quite some time, has really only been focused on that function, that sort of budget review every two years.

We did have some audit findings from the Division of Internal Audit that talk about the TIR process, and basically, their recommendations are that it needs to be more robust, that it needs to be reviewed by more subject matter experts. I can tell you the way it's been working since the recession. Basically, you have a person at EITS that collects the forms in, makes sure they're filled out, and they kind of process that through, and then it goes to the IT Strategic Planning Committee. I don't want to minimize what they do, because they've been doing a lot trying to keep that running, but it's more than, you know, one person can really do justice to. So, the audit suggests that it go to the Chiefs of the divisions within EITS to comment on them and talk about bandwidth, talk about data centers, that sort of thing.

We have some things in the works to address the TIR process, to address the audit. The most notable thing that is about to be released is sort of revamping the TIR process and turning it into technology investment notification. David and his group have been working really hard on this. We do have some manuals for the technology investment process, and the Technology Investment Notice is much less onerous than a TIR. The TIR instructions required a lot of information to be put together, and I think it was often a source of frustration to agencies, and there were always debates and questions about what required a TIR and what didn't require a TIR. So, the Technology Investment Notice is much more streamlined. It's basically a series of questions that you go through to notify EITS and the CIO of the projects that people have, and then, depending on the complexity of the project, more in-depth analysis can be asked for and can be provided. And if there is a big project that already has a lot of documentation that they've already done in how they're going to approach this, well, in the old days, they had to cut and paste and put them into the TIR forms and make it all fit into the government forms that we had for TIRs. So, instead of that, if they need that information, they can just attach it and upload it and it's all online.

That will be discussed at the budget kickoff meeting. We should have a memo going out soon to notify agencies of the change in process. I think it will be more streamlined. I think agencies will like it more. The one thing they may not like is we're really asking for any investment of \$50,000 or more, that they do a Technology Investment Notice, and I know over the years, there have been questions about what that applies to, what a TIR should apply to. Hey, we're just subscribing to this service. It doesn't really require a TIR. It's not a traditional technology project. We're just subscribing to a service. Well, but it's a technology service. It's a software as a service, it should require a TIR. I think we're probably casting the net a little wider, and when people have to do this notice, but always much more simplified type of process. I went through it with David Haws, and it seemed very straightforward, very intuitive, very easy to use, and it's just simply answering questions. I'm pretty excited about that.

I did want to talk just briefly about the SMART 21 project. The SMART 21 project, we have a project team stood up. They have been working on the release of an RFP. We expect the RFP for SMART 21 to be released by the end of next month. I sit on the executive committee for the SMART 21 projects myself. It's Jim Wells and Ron Knecht, the Director of Governor's Office of Finance, and the State Controller, and when we started this project, we hired an MSA contractor to be the Project Manager, and then we hired several other MSAs to be Business Process Analysts.

And we made some progress with that group, but we quickly realized that everything didn't quite seem to be in sync where we thought it should be, and we began to be concerned that we just weren't putting in enough resources for this monumental project. So, we brought in Gartner Consulting and asked them to help us with a strategy of not just developing the RFP, but how to approach this project, and they made some recommendations that we followed, and that was to set up a really robust office of project management with an Executive Director, with Project Managers, integration people and not using MSAs, using state employees, using state positions.

So, we went and created—gosh, I think they're up to, like, seven state FTEs that they created for this project, and I really do think it follows the best practice. I think we've learned a lot, and we're doing, I think, much, much better with that approach, and I think that is something that agency struggled with a lot on IT projects, and I think one of the reasons that technology projects fail is because they don't put enough human resources to the effort. So, I feel pretty good about where SMART 21 is. Just to remind everybody, this would replace the State's HR and financial systems, the core systems that were put in place about 18 years ago, and the go-live date, tentatively, is the end of June of 2020 when the system is supposed to be live. So, I'm excited about that. I know it's a monumental project, and no matter how well we plan for this, there will be dark days ahead, and things will be difficult. But I feel like we've at least appropriately staffed it, which brings me to speak briefly about two other projects, and that's the DMV SYSMOD project as well as the OTIS project that's a Parole and Probation project.

I think there's lessons learned from both of these projects. I'll start with OTIS since that's ours. It's an EITS-managed project. The OTIS project is to modernize and update Parole and Probation's case management system, OTIS, and Public Safety went, and EITS went with them, to the Interim Finance Committee back in December to inform them and to ask to move some funding around, to inform them that the project was not completed on time and that they needed more money. I think it was \$1.7 million and basically about another year.

The reasons that were cited for that were, in my mind, kind of twofold, and it was really not enough resources put on it. So, they had hired an MSA, a contractor, to be the Project Manager. They had some other MSA people on the other side, not really enough people, not really the right people, not a lot of ownership from the State people themselves, that they didn't get as much oversight as they should have gotten. Also, there was a real lack of project management discipline. One of the things where they really stumbled was they drafted some system requirements, and they never had the agency sign off on them and just started coding to them.

So, I think that project is on a very good path now. All of the things that we did to set up the SMART 21 project as far as the project office, all of those artifacts were given to EITS for their application development group so that they could create some consistencies and discipline and guidance on how projects are managed. And I know EITS management is now very actively involved in this project, so I think it will be successful going forward, but it's a lesson learned to what happens when you don't put the right human resources on your IT project.

And then I'll turn briefly to DMV SYSMOD. It's been in the news. They had an internal audit. They also had Gartner evaluate their project, and they put a full stop on their project. They stopped. They were about \$17 million into their project, and the failure there was, again, twofold. One, the vendor, Tech Mahindra, it's pretty clear in the audit, did not properly staff the project, didn't meet deadlines. There were a lot of issues on the vendor side, but equally, DMV, I think there is a recognition that they also did not properly staff their project. They relied on MSA contractors to own it and didn't have enough actual State employees that knew the business on the project. I had a very productive meeting with Terri Albertson, as I mentioned earlier, and the SMART 21 project is going to be giving them all of the artifacts on how they created their project office and work with

them to help them use those same principles and approaches for what they move forward with for SYSMOD.

Those are examples of what I see happen over and over in my 21 years of state service of IT projects that go over budget, over time, or fail more often than not in my opinion. It's a lack of human resources. They either don't put the right people on it, enough people, or the people with the right skills, and you have to be very purposeful about that. One of the things that we have in the SMART 21 project for the OPM is a change management position. This is a very high-level, skilled person that is just looking at the human element in the change management and how you bring people around, because if you neglect that and don't put resources on that, I don't care how great the technology is. If you don't bring the people with you, you will fail. So, I'm very interested in that as well.

The Division of Internal Audits is continuing to do audits. They have some audit reports that if you haven't seen them, I could share them with the group, but they have done an audit related to the Technology Investment Request. I talked about that, but they're also working on audits currently. I think they're going to be published in April, and I will tell you one of the things they're looking at as a recommendation is that the State establish a very rigorous project management training discipline so that all agencies' IT staff that are involved in these projects have the right certifications, have the right training, are using similar processes so that there's some consistency.

I was pretty surprised to learn that even within EITS and the Application Development group; it really depends on every individual skillset. And once upon a time when times were better and they hadn't lost staffing, there was a lot more consistency, but during the hard times, people just catch all as catch can, and it's kind of deteriorated, and it's really dependent on what individual skillsets people have, and we're just not very methodical about making sure they have the right skillsets. So, I'm not quite sure what that recommendation is going to look like, but they're looking at that, particularly, after SYSMOD, after talking to them about SMART 21.

I think they may ding us for the infrequency of ITAB meetings. We're required by statute to meet quarterly, and that has not been happening for quite some time. I think that we are fixing this, because we now have a schedule, and we just need to make sure we stick to that. They also may make some recommendations regarding submission and review of IT strategic plans. There is some reference in statute that ITAB is supposed to review agency strategic plans. I don't know if that's ever happened, but not in my tenure has that happened, and I don't think, certainly because during the recession, that there's been a lot of effort put towards that. And when the auditors asked Shanna about if EITS receives these IT strategic plans, the answer was no, and the question was, well, don't you think we should be doing this? And the answer was, well, we meet regularly with the other State CIOs, and we chat, and that's how we learn about what everybody else is doing. And I said, well, that's a far cry from actually planning. So, maybe we need to figure out how to get back to that.

I think there's only so much we can do with existing resources, but I think we can change some resources around. I think we need to make ITAB a priority. I fully support what the Chairman said at the beginning of the meeting. I think we need to engage with you and help you fulfill your statutory responsibilities, and that's part of that. The other thing that they are looking at is Switch and data center consolidation. I don't know what recommendations they'll come out, but they really are interested in the Switch contract. They've asked us a lot of questions. I relayed to them kind of what I just told you. They are trying to look at cost benefit analysis, and I have no idea what kind of recommendation they're going to make. Maybe it will be a dead end and they won't have a recommendation. I don't know, but they're definitely looking at that and trying to see if they can make some recommendations to the State in relation to that.

We will definitely have some BDRs related to EITS statutes. Some of them, we're going to need to do some conforming changes to match the reorganization that I showed you. Most of the statutes refer to the EITS Administrator solely as doing more strategic things, so we kind of need to parse that apart a little bit and make sure we've got the right people identified. I think the IT Strategic Planning Committee ought to be put into statute, and it ought to have more clearly defined duties and roles. I think it should be a governing board over state IT and not just something that meets every couple of years to review projects. Once upon a time, they had a larger role like that, but it's kind of receded with the recession, something I really believe we need to get back to so that we're all coordinating across the Department and it's not EITS trying to tell other agencies what to do, but it's a committee of agency directors agreeing mutually on how to move forward on things.

One other thing I wanted to mention, I went to a blockchain conference in Reno last week. This was a conference hosted by McDonald Carano for Senator Kieckhefer, and it had several key State officials there as well as a variety of people from the private sector. The one thing that I thought was very interesting there that I think may have some value here is the State of Illinois issued an RFI related to blockchain, and they had about 30 business cases for State where the State officials felt there might be a role for blockchain. And they threw it out there to the private sector to propose some solutions for that at no cost. They said they've learned a lot from that, and they actually are interested in actually pursuing some of those as proof of concepts, and they're actually seeking some funding right now from their Governor's Office to proceed with that.

I'm not sure what we'll learn. I've tried to educate myself on blockchain as best I can. It certainly is an underlying technology that could be very powerful in a lot of applications. In some ways, my attitude is, it's an underlying technology when vendors come to us with solutions for the State that use that technology. That's when it will be ready for State use, but on the other hand, if we can invite these companies in, the smaller ones in particular, and ask them, you know, to be creative and tell us how they might apply it, I think we could learn a whole lot. And maybe there's ways that it could benefit the State.

One other thing that came out of that is Senator Kieckhefer also made a comment in one of the discussion groups about what the State needs to do next for blockchain, and an idea was tossed around about having a blockchain Ombudsman, if you will, with the State, which is kind of what Illinois has, somebody that can engage both with the private sector as well as government and try to find a fit and connection there. My only caution in following Illinois is they're Illinois, and we're Nevada, and we are on totally different scales. And what they might do with their public money may not fly in Nevada, but definitely very interested in exploring this. So, we'll see what comes out of that. And just one last thing.

I know I've been talking quite a bit, but one last thing that I wanted to tell you about that I think might be ready to present to you by your next meeting is a project that I'm working on. It's more of a capital improvement project, and that is to renovate the Nevada State Library and Archives building and turn it into a state-of-the-art center for collaboration, for training, and for technology. We are branding it the Nevada KIC, the Knowledge and Innovation Center. It would take a lot of the Library and Archives building. Before the recession, it used to have a lot of meeting rooms and conference space. And during the recession, that was all closed down, and they brought State employees into those spaces. If you were ever in the building before that happened, for instance, the gallery was a beautiful room. It was the bottom floor of what was the old print office. It's one of the oldest buildings on the campus. Since the recession, that is where some of the EITS Application Development Group is. So, it's a historic, big space. It's been turned into a cube farm behind secured doors, and people can't even see it.

I think we're in an opportunity now with the economy improving to really convert that facility back into what it was intended to be, but not back into what it was, because a modern 21st century library isn't what they built in 1992 when they built that building. So, I have some really exciting renderings of interior redesign of that building that would basically take most of the collections, the rows of books, the stacks of books and put them in closed storage and make the floor space a combination of collaborative work space, conference rooms, meeting rooms. I think on the first floor of the library alone, we've carved out, like, eight different meeting rooms of various sizes. I want that building to be a centerpiece for State training, Human Resource management; I want them to offer more training.

One of the things that we're working on as a big budget initiative is—or multiple initiatives, really, is the state workforce. Governor Sandoval asked the Cabinet to form an HR working group that we have been meeting every couple of weeks now for a couple months, and we've been dealing, kind of going through a whole bunch of issues related to the state workforce. And one of the things that we've talked about is the need for more training for employees. It traditionally has been pretty hard to get funding for training. It gets cut a lot. I can tell you that when I was at Wildlife, I put forward a training initiative just to have a pot of money to provide training to our managers and employees, and I got it through, but it was a fight, and I ended up getting half the amount of money I asked for, and I didn't ask for that much.

I think if we want an effective and responsive State Government, we have to be very purposeful in how we invest in our employees. It's not enough just to hire people. We need to be willing to train them, and I think this center could foster that. I want to make sure that the State Library has the resources and materials that are relevant to State Government so it's a useful place for them to be, and one of the things that particularly related to IT that I think where this building could serve a great purpose for the state is vendors and vendor relations.

We have IT vendors that are knocking on every agency's door all the time. I get calls and emails constantly, and they kind of do this one at a time, go around and talk to these agencies. Well, what if we hosted vendor events and came in and had different vendors and different spaces and have them come in and demo that for all the agencies? I think there's an opportunity there. I want to pursue creating some internships, particularly, IT interns and maybe some library science interns. I'm also going to be pursuing some corporate sponsorships to invest in technology of the building. I've had some discussions with some technology companies, and I think there's some interest there. I'm also going to ask them to consider funding some of those internships so that agencies can use this facility to interact with their vendors. They can work on projects together. I'm really excited about that. I'll have some pretty impressive drawings for making that building a real centerpiece of State Government instead of what it is now, which is a very underutilized and poorly utilized for what it was designed for. So, I think that's everything.

Chairman Diflo: Thank you, Director Cates, for the very clear explanation of the direction you want to go, and the candid disclosure of some of your existing projects. I love the idea of the internship, by the way. I'd like to open this up for discussion of what you presented, and I'd like to start by just saying I'm pleased to see that you're proposing the development of a Cloud strategy. As all of you know, I represent the private sector, and in the private sector, I have an opportunity to collaborate with many other CIOs and VPs around the world, and there aren't many, if any, that are not taking a Cloud-first direction.

As we know, it doesn't make a lot of sense for us to spend our time and our money on doing the building, the patching, the maintenance of the infrastructure to deliver what we really want to get to our customers, which is the application. So, for a while, people were tentative with the nebulous Cloud, but it is fully being embraced by the industry. And if you're going to take a Cloud-first

strategy, it is imperative that you have a document that lists your enterprise architecture principles and that you have standards that go along with it, as you said. So, I think the notion of bringing Gartner in to do an assessment like that is a sound one.

Having said that, it appears to me that you've gone over a lot of items, and there are probably so many items here to digest. We may not be able to say we as an ITAB Committee endorse everything that you have said here, but correct me if I'm wrong; the high-level notion of Cloud-first or developing that Cloud strategy is something that's key to—as you stated, you want to fund this in the next biennium. It seems to me it might be prudent for us, and I'd like to get input on this as an ITAB Committee, to endorse just that and say as a Committee, we endorse the Cloud-first strategy and the development of a Cloud strategy or standard. I'd like to open that up for discussion.

Catherine Krause: I definitely endorse developing a statewide Cloud strategy. I personally couldn't say Cloud-first or not yet. I think that needs to go a little further into that, and I think that's along the lines of what Director Cates said. I don't think he was quite ready to go to Cloud-first yet either, although that may very well be where it ends up, but I definitely completely concur that we should have and need a Cloud strategy for the state.

Chairman Diflo: Thank you.

Patrick Cates: I actually believe the state should have a Cloud-first policy. I just think that not everything is ready to go there yet. That's kind of what I meant by my comments. I think I have seen and read enough to convince me that there's a very good business case for going Cloud-first, but it's like that's your preference. Well, maybe there's not a good application in the space that is in the Cloud. So, just to clarify that.

Sherri McGee: Great job. A lot of these things you're talking about, a long time coming. The Strategic Plan, the Cloud-first strategy, the project management all needs to roll up and be tied together. So, that would be a recommendation from me, and as far as a Cloud-first strategy, I have Cloud-first as a principle in my strategy, and basically, what that Cloud-first principle says is that you will look at every implementation if it can be vetted in the Cloud. So, it's not that you're just going to push everything in the Cloud. You're just going to make sure you're looking at those as they're coming across your plate. So, I fully endorse that.

Back to the Strategic Plan, I'd like to see those types of items in a Strategic Plan, and something that the Department is working toward currently on the website, I think it's 2012 draft of a Strategic Plan that's just been sitting out there. So, you know, it would be nice to tighten all that up and pull all that stuff together and especially with the project office as well. I'd like to see for this Board to have, a high-level dashboard maybe of all the projects that are going on, timelines, if they're falling in the red on budget, due dates, things like that, so we can see if there's—yeah, something like that would be great for us to look at and review. And also with your Cloud-first strategy, when you start looking at that, don't forget about your personnel and how the personnel within the state--the dynamics and the skillset are really going to have to change with that. So, you want to have a lot of technical people. You're going to be having more vendor management, contract management, those types of things under the staff's belt. So, anyway, great job, and thank you.

Chairman Diflo: Mr. Betts?

Craig Betts: Craig Betts for the record. First off, my apologies for running late and to you, Director Cates, for missing the first part of your update. Great job also. I thought there was a lot of material in your update, but to specifically talk about the Cloud strategy, I think developing one is very, very important. I believe in eventual. I think it's, you know, Cloud-first or new applications

that are coming forward, but you have existing legacy, the applications that someone may have taken a lot of capital to build, and you want those to run their course before you prematurely interrupt that. So, that's why I think a strategy is not going there all at once, but eventually getting there. Thank you.

Director Malfabon: Mr. Chairman, Rudy Malfabon for the record. So, definitely, I applaud the direction that you're going in. My concerns would be that with NDOT, our government structure, having our own transportation board, having them approve our contracts, we do TIRS, although, you know, we have our own thoughts about when they're required or not, but we're complying with that direction. As you mentioned, we've gone into some of these things moving to the Cloud, Office 365 successfully, and I would be concerned that if there's a process that hampers our ability to kind of be at the forefront, we definitely have some benefits that other general fund agencies don't have.

We have the Highway Fund. We have the ability to go build that into our budget as far as significant projects that are IT-related projects, such as the Transportation Asset Management System that we had legislative approval for related to our Stormwater Program and assets such as Bridges and Pavement. So, I would just be concerned that it doesn't hold back an agency like NDOT that has more ability to rely on the Highway Fund to kind of try out some of these things and also has the staffing. You know, I know that's a challenge also for other agencies that are general fund. We have a strong IT staff that's able to get these projects underway and can often be a lead agency for the State to look into some of these applications. So, that's only my concerns, but I think it's a great direction to have more oversight so that some of the problems that we've seen with some of these projects—and it's not just more recent. It's been years ago that this has always been a challenge on IT to have the staff that have the skillset to manage consultants doing these types of massive projects for IT services. It's difficult, and it's a challenge, but I think, Patrick, you're doing some great work in a lot of these things that would address and help us to be more efficient, effective with state agencies in general and also to have the proper oversight.

Chairman Diflo: Director Cates?

Patrick Cates: If I could just respond to that. I appreciate Rudy's comments, and I think it's very important that we approach this in the right way so that agencies that do have means and ability like NDOT aren't hampered. You know, the TIR process I think is something that every agency, regardless of funding, needs to go through, because it's part of the budgetary vetting, and to have one place where everybody's projects are I think is a good thing. I don't think that should be dependent upon funding or what boards people have. People have all kinds of different funding and boards, and I know just my experience in talking to legislators or even the Governor's Office, it's all public money. It doesn't matter if it's Highway Fund or general fund or fees. It's all public money, and we need to do our diligence as a state in how we use those funds.

Having said that, what I'm hoping we get to is with this IT Strategic Planning Committee, that it is really kind of the governing board of how these policies are implemented, what policies you implement. So, each Director is going to have a vested interest and not approving policies that are going to hamper their agency. So, I think that's important to keep in mind, and, you know, when we talk about something like the Office of Project Management and setting some standards, I don't want to see, you know, some entity in EITS trying to manage every agency's IT project. I don't want to see that at all.

What I want to see is that we have developed some standards in how you approach these things, and agencies would have to show that they have the proper staffing, have all those things. So, it's not running them for the agencies. It's just making sure they've checked all the boxes is what I'm hoping we get to, and I think having the IT Strategic Planning Committee, the collective of

Directors have governing oversight over that, I think it would be successful.

Chairman Diflo: Thank you, Director Cates. Are there any other comments on this Agenda Item?

Senator Denis: Thank you. So, a lot of the questions that I was going to ask have already been addressed. I agree that, you know, we need to have, especially from a legislative perspective, some kind of a plan that legislators can look at and say, hey, as a state, we're trying to get there. And I was real interested to hear the discussion that just occurred on that IT Strategic Planning Committee that would take into consideration all the different agencies and their IT departments and yet still be able to come up with an IT plan for the state, an overall plan that everybody agrees we need to work towards. I think we as legislators have seen in the past that we don't always work together amongst all the different things, and for us, as has already been mentioned, the money is all—it all—comes from, you know, from the same place, essentially, even though it may be allocated from different areas. And so I like that idea of having the IT Strategic Planning Committee that has been recommended.

As far as what we need to do here today, is there specific things that need to be done today? As was mentioned earlier, a lot of this is we're just hearing it for the first time. Is there a deadline for us to be able to figure out what we need to do and what we need to do today versus what we can be able to have more time to do to come together on?

Chairman Diflo: Director Cates?

Patrick Cates: Sure. You know, I knew I was going to be throwing out a whole lot at once without any advanced warning. So, I didn't have any expectation that ITAB would take any action today on this, especially if they weren't ready to. I think we can bring back some more of this and have some more detailed discussion at our next meeting. Starting the project with Gartner to develop this Cloud strategy, I'm really anxious to get moving on. We're probably going to have to move some money around and go to IFC, so it may take three months. It depends on what the group does, if there's a consensus to say, hey, yeah, we want to endorse you doing a Cloud policy. That would be helpful, but I would understand if you weren't prepared to make any motion today.

Chairman Diflo: Are there any other comments?

Senator Denis: I appreciate that comment there, and I know that some have said if we need to do—I like a general policy. I think if we have that discussion today about moving forward on some kind of Cloud policy, not necessarily a specific thing, but at least something that could give him some direction to be able to move forward so that—in the previous, and then in the next meetings, we could have maybe more specific discussion on some of these proposals and be able to get some more information and be better prepared to have that discussion.

Chairman Diflo: Anybody else? Are there any other comments? Okay, then I would like to ask for a motion for ITAB to endorse the creation or the development of a Cloud policy.

Sherri McGee: I would recommend that we endorse a Cloud policy, the Department of Administration, to go forward with developing a Cloud policy utilizing the Gartner contract.

Chairman Diflo: Can I ask for a second?

Director Malfabon: I'll second.

Chairman Diflo: All those in agreement?

Senator Denis: Mr. Chair?

Chairman Diflo: Yes, sir.

Senator Denis: This is Senator Denis. I just wanted to clarify, because you did this on the other two. You didn't allow for any discussion after you took the motion, and I just wanted to clarify the motion in my mind before we vote.

Chairman Diflo: I apologize. Yes, go ahead.

Senator Denis: Thank you. So, basically, what we're voting on right now is to allow the Director to go forward and come back with a suggested policy for us to look at in the future. Is that the simplified version of what we're doing?

Chairman Diflo: I believe that's correct, yes.

Senator Denis: Great, thank you.

Chairman Diflo: Okay, then I'll ask again. All those in favor? [ayes around] All those opposed? The motion is carried. Thank you, Director Cates.

Patrick Cates: Thank you.

9. INFORMATION SECURITY UPDATE AND STATUS OF SECURITY GRANTS (*for discussion and possible action*) – Robert Dehnhardt, State CISO.

Chairman Diflo: That will take us to Agenda Item 9, the Information Security Update and Status of the Security Grants, and let me welcome Bob Dehnhardt, the State CISO.

Bob Dehnhardt: Thank you, and good afternoon. For the record, my name is Bob Dehnhardt, and I am the Chief Information Security Officer for the State of Nevada. I appreciate the opportunity to speak with you all today about the information security initiatives currently underway by the Office of Information Security, or OIS, and the plans that we have for the future. One of my highest priorities is to make sure that OIS is aligned with the needs of the other agencies. I work to partner with the agency Information Security Officers, or ISOs, and use their needs and their input to inform the strategic decisions that are made at the state level.

The goal of this strategy is to provide the agency ISOs with the support, tools, information, and resources that they need to be more effective in their jobs, even if that means putting some of our own pet projects on hold. I'm happy to say that in the past nine months, this has worked well with broad support for the things that we're doing and increased engagement from the agencies in the monthly State Information Security Committee meetings. One of the early successes from this effort has been an enhancement to the security awareness training that all state employees are required to take. A new service which is planned to begin implementation in April has updated training courses covering a broader range of topics than the current offering and allows agency ISOs to test their employees and provide feedback to reinforce the training.

We're also currently working on getting preferential pricing for local tribal and territorial government entities for this same service. As Director Cates mentioned, the 2018-2019 biennial

budget for OIS contained an enhancement to fund cyber security with a focus on a new governance risk and compliance function, enhanced continuous monitoring for the state infrastructure, and improved access to threat intelligence. And I'd like to describe how these three focus areas are being addressed.

My vision for the GRC function is to have it act as a resource, the subject matter expert, and internal consultant to assist agencies in building their own GRC functions statewide. This person in this new position will work with agencies to help them formalize and categorize their governments, that is, their internal policies, standards, processes, and procedures, and ensure that they align with state and federal governance. They'll also aid the agencies in managing their compliance requirements, including organizing and cross-referencing the often contradictory frameworks from different federal agencies. Once these areas have been addressed, the GRC coordinator will help the agency perform security risk assessments, develop risk management strategies, and be a focal point for compliance audits.

To assist in this effort, we'll purchase a multi-tenant software tool designed to support GRC functions, which will be made available to all agencies. The result will be a collaborative state GRC program with each agency owning their own piece, aided and coordinated at the state level by OIS. We're currently interviewing candidates for this position and beginning to evaluate possible tools. A key piece of any information security strategy is continuous monitoring, looking for signs of malicious software or activity within our environment. A lot of effort has gone into building our security operations center supported by a managed security service with a goal of monitoring network devices and servers at key points in SilverNet.

This effort has been largely successful. When the WannaCry ransomware was taking down systems worldwide last May, State agencies in Nevada saw only eight systems impacted out of over 18,000 potential targets. That's pretty darn good; however, our ability to monitor our environment has been limited in the number and types of devices monitored due mainly to license and budget constraints. The budget enhancement we received combined with some grant funds will allow us to move to an enterprise monitoring license where those limits are largely removed. We're currently negotiating the final price on this and expect to have this in place early next quarter.

In addition to this, we have also engaged with the Multi-State Information Sharing and Analysis Center, or MS-ISAC, to add their analysis and expertise to our security monitoring and review. To better evaluate the security alerts we received from our managed service at MS-ISAC, we're purchasing a tool to provide threat intelligence from a wide range of professional information feeds. The tool we've selected also provides a means of communicating and collaborating on incident response activities, which should greatly improve our response times. It's currently being used by MS-ISAC, which will allow us to work more closely with them. The tool is also multi-tenant and will be made available to all agencies as well as the Nevada Threat Analysis Center and the Office for Cyber Defense Coordination.

We're anticipating some budget savings in these areas over what was authorized, and so we're looking at some more complementary technology and services to further enhance our resilience and capabilities. One area we're pursuing is an incident response retainer with a professional incident response provider. This retainer would work in conjunction with our current cyber insurance to provide coverage for major incidents such as the medical marijuana portal incident that was reported in the press last year. By having a retainer in place, we will be able to get quicker professional response for the agencies that are being impacted, be it root cause analysis, digital forensics, code review, mitigation strategies, or whatever else the agency needs to address the incident.

If all of the funds that are used for this retainer aren't used during the retainer period, they can be used for incident response related activities, such as planned development and review, responder training, or tabletop exercises. Moving on to the Homeland Security Grants, these are a different sort of challenge since their purpose is more tightly defined and they don't represent a continual, steady funding source. I view them as a means of providing one-time expenditures or piloting services and technologies that may eventually become additions to our base budget pending legislator approval. I'm also very mindful that these are public funds and want to make sure they are used wisely, and that's why my first step is to fund an assessment of our network infrastructure.

I found in the past that people who work day-to-day in an environment are sometimes too close to the work, and through no fault of their own, they can fail to see deficiencies that they've become accustomed to. Bringing in an independent assessor can highlight these areas. The results of this assessment and others will be used to generate a prioritized roadmap to improve our overall security. Beyond that, we're considering a pilot project for secure domain name services. Computers use these services whenever they access a system on the network. A secured service will block them from going to known or suspected malicious sites. The service we're considering is cloud-based and will protect state users and computers inside or outside of SilverNet. This is an important consideration as we move to a more mobile workforce, since our current security technology is largely limited to SilverNet. We need to be able to offer effective protection to our state resources wherever they are, and we'll continue to look for solutions in this area. Thank you again for this opportunity. I'll gladly answer any questions you have to the best of my ability.

Chairman Diflo: Thank you, Bob. I know security generally generates a number of questions, so I'm sure you'll get some.

Bob Dehnhardt: Yes.

Chairman Diflo: You had mentioned the enterprise monitoring license. Did you look at outsourcing that function? Companies like Datashield, for example, can monitor for you and then send you alerts, even open up incidents.

Bob Dehnhardt: That's what we're doing right now. The managed service that I mentioned is an outsourced SOC that is accepting our logs from a number of devices and running it through their analytics engines, and then it's reviewed by their SOC staff, and we get the alerts that are coming from that. The enhancement is giving them more information, giving them logs from more devices so that they get a fuller picture of the traffic patterns that we're dealing with, the types of things that we're seeing both on the perimeter of SilverNet and internally, and that will allow them to do better analytics for us and also to see things that currently are blind spots in our environment. We're trying to eliminate those as much as possible, and then the MS-ISAC addition to that is an intrusion detection device that will be placed one in the north, one in the south just inside our perimeter, and they'll generate different types of traffic analysis to go to the MS-ISAC security operations center. And they will also use that to give us more alerting and a different view of what we're looking at now. So, we are outsourcing as much of this as makes sense and then using that internally to coordinate incident response with the agencies.

Chairman Diflo: Okay, thank you, Bob.

Bob Dehnhardt: Sure.

Chairman Diflo: Just one more question from me, then. You had mentioned the GRC initiative, and did I interpret it correctly that you would have a single centralized tool, then, for all the agencies to use?

Bob Dehnhardt: Yes. We're looking at a tool that is centralized, but multi-tenants so each agency can put their governance documentation, their compliance frameworks into it and use it to develop their own GRC. Those pieces are then used to drive the risk assessments. By using a single tool, we can have, at the state level, an overview of what's going on with the various agencies. We can help them work on their governance and compliance. When auditors come in, we can use that tool as a central repository for the compliance statements and artifacts needed for those audits. And the grand vision is that an auditor comes in and asks for a report. We can generate that report from that tool to include specifically EITS, which is in a unique position of having to support the governance of multiple agencies and usually gets slammed around audit season. Like, IRS is coming to town next month to do their on-site audits of three different agencies. And so EITS gets requests from each agency for audit information and artifacts. By having it centralized in one tool, that takes some of the burden and some of the load off the technicians and makes the audit process go a lot smoother. I love auditors, but I want them to come, get their information, and leave.

Chairman Diflo: Great, thank you. Are there any other questions for Bob?

Director Malfabon: Just a general question about sharing information on some of these sophisticated attacks, we see a lot of phishing attempts now, and they're using legitimate emails.

Bob Dehnhardt: Absolutely.

Director Malfabon: It's just getting more and more common. I know that our system is really working overtime to try to catch all these things, but informing employees about watch out for this; don't open that attachment. Is there a lot of sharing of information between IT staff of agencies so that everybody knows, because it's common for them to try this everywhere? It might be in succession. They've done it with different public agencies where RTC in Washoe County got scammed from a simple email.

Bob Dehnhardt: Yes.

Director Malfabon: So, just a question about sharing of information on these types of attacks.

Bob Dehnhardt: My answer to is there sharing of information or how much is always never enough. You know, through the Information Security Committee, we try to encourage agencies to share information about what they're seeing, and we do have a secure list serve that we use that only goes to agency ISOs, and we use that as much as we can. Certainly, anything that my office sees coming in or going on, we share out. We encourage agency ISOs to share. Some do very frequently. Others are a little bit reluctant to, but we try to make sure that they know that anything that they share is not going to be attributed to them. You know, I'm very careful never to attribute something that we've seen to a specific agency when we're discussing these things.

As far as getting the awareness out to the individual staff members, the new security awareness service that we're getting, I asked a number of state ISOs to be involved in the evaluation and selection, including Jeremy Brown, your ISO, and we ended up going with the same one you're currently using. So, once your contract runs out with them, we'll be glad to take you under ours, but it's just a great tool. You guys are leading the way on that, and I really appreciate Jeremy's input and advice on that evaluation. It really helped us a lot, but that's the sort of thing that I'm trying to do, is encourage agency ISOs not only to share the problems that they're seeing, but also the successes that they're having and the tools that they're looking at and liking, and we take that, then, and look at seeing if we can make that available at a statewide level.

When I was at Welfare, I saw within HHS that there were haves and have nots. Welfare had an influx of grant funding through the Affordable Care Act, and we were able to buy a number of things that we could use internally to improve our security, but our sister agencies didn't have access to that. And now that I'm in this position, I'm trying to make sure that all the agencies have the access to the tools and services and support that they need.

Chairman Diflo: Any other questions for Bob? Okay, thank you, sir.

Bob Dehnhardt: Thank you.

Sherri McGee: Thank you very much. I was just curious about these contracts that you're negotiating. Are they just a state focus or are you going to be putting any language in any of those for any of the local entities as well?

Bob Dehnhardt: I share Director Cates' focus on getting this stuff available to as many people as possible. So, yeah, anything that I talk about as far as contracts go, I look at and push for language to include the local and territorial and tribal government entities as well.

Sherri McGee: Great. We have a group that meets regularly, state, local, Ed, those types of things, and maybe you could come and speak to that at some point. We would love to have you.

Bob Dehnhardt: Absolutely. I would welcome the opportunity.

Sherri McGee: Thank you.

Chairman Diflo: Thank you, sir.

Bob Dehnhardt: Thanks.

10. GOVERNOR'S INITIATIVE FOR Office of CYBER DEFENSE CENTER (*for discussion only*) – Shaun Rahmeyer, DPS Division Administrator, Cyber Defense Center.

Chairman Diflo: That will take us to Agenda Item 10, which is the Governor's Initiative for the Office of Cyber Defense Center. So, I would like to welcome Shaun Rahmeyer.

Shaun Rahmeyer: Good afternoon. Thank you, Mr. Chair, Committee Members. For the record, my name is Shaun Rahmeyer. As mentioned, I am the new Administrator for the Nevada Office of Cyber Defense Coordination. I'm here today to provide a brief overview of the office and answer any questions you may have. The inception, as mentioned, for the Nevada Office of Cyber Defense Coordination, or OCDC, stems from Nevada Governor Brian Sandoval's initiative to champion cyber security across the state of Nevada, announced as a leading priority during the Governor's 2017 State of the State Address. OCDC gained traction as Assembly Bill 471 and received a wealth of support from numerous government and non-government organizations across the state.

On June 2nd, 2017, Assembly Bill 471 was passed into law establishing the Nevada Office of Cyber Defense Coordination. OCDC is currently housed under Nevada Department of Public Safety, allowing for a simplified coordination of support resources.

The Office of Cyber Defense Coordination works with state and partner components for the synchronization and coordination of strategic cyber security initiatives within Nevada. OCDC will

not replicate existing programmatic or budgetary mechanisms or interfere with previously defined cyber security roles, rather, it provides a single platform to integrate cyber security initiatives, manage cyber security policy and planning, and streamline cyber security governance structures. Further, OCDC provides executive level advice and recommendations on key security issues to the Governor's Office, Nevada State Legislature, State agencies, political subdivisions, tribal governments, private sector entities, and the Nevada Commission on Homeland Security.

To specifically address the increasingly diverse cyber threat environment, OCDC is developing and will implement a comprehensive strategy to deter state and non-state actors from conducting malicious cyber activity against the State of Nevada and its interests. OCDC is currently in the process of developing a framework to enable the State of Nevada to work with public and private stakeholders to effectively respond to and mitigate the impact of cyber-attacks in Nevada. This strategic framework outlines five core goals to include adoption of strong information management policies, processes, and best practices initiatives to aid in the safeguarding of information systems, development of incident response teams, strengthen a cyber ecosystem, and robust cyber security education and training initiatives.

These core goals represent the first step in realizing an improved cyber security outlook across the state of Nevada. We believe these essential and achievable goals will enable and empower entities across the state to improve their unique cyber security posture. For additional detail on these five core goals, I recommend please visit the OCDC webpage on the DPS website. You'll find a publicly available strategic plan outlining and that additional detail, these goals. Again, I mentioned this was just a brief overview. So, barring any questions, this does complete my presentation.

Chairman Diflo: Thank you, Shaun. One quick question, or maybe it's a question for clarification, and that would be your relationship with Bob and where that collaboration or overlap is.

Shaun Rahmeyer: Thank you for the question. Shaun Rahmeyer for the record. That's a very great question I get a lot, not only with Mr. Dehnhardt, but the new CIO that Director Cates will be bringing on. There's obviously a lot of bleed-over in the roles and responsibilities as the way AB 471 was written. Just keep in mind that the breadth of the Office of Cyber Defense extends beyond the executive branch of state government. And while some of the roles do bleed over into Mr. Dehnhardt's role as an example, I believe that in our current cyber threat environment, there's not really anyone saying there's too many people working cyber security issues. Bob and I, we have a great working relationship, and, where I can assist him, I'm happy to. A wealth of the role that I'm advocating in my capacity is to be a force multiplier for agencies. We don't necessarily have the capability to do everything, but no agency has the capability to do everything. So, where we can fit in and provide that additional access to resources, that's the role.

Chairman Diflo: Okay, good answer. Thank you. Any other questions for Shaun?

Senator Denis: Thank you. And I think you mentioned this. This is great to be able to get this going. I know that we had this discussion at the legislature when we approved this, and my question to you is, it sounds like you have reached out to other non-state, so, like, local government and other—is that true? Is that accurate?

Shaun Rahmeyer: Thank you for your question. Shaun Rahmeyer for the record. That's correct. I was actually just in Las Vegas on Monday meeting with a number of entities there, so yes.

Senator Denis: So, how has your reception been with them? Are they willing to sit down? Are they excited about it, or is it just one more thing to do or what?

Shaun Rahmeyer: Sure. Thank you for the question. Shaun Rahmeyer for the record. Absolutely, I haven't met with a single entity that isn't interested in someone trying to harness the capability of cyber security within the state and bring it all together. The goal, in part, is to create a more holistic approach to cyber security. As an example, you know, the Department of Administration and Mr. Dehnhardt's Office of Information Security, they're moving forward a number of initiatives, and the goal of this office is to ensure that as public funds are utilized, you know, we're getting the bang for buck and that access to certain resources are available. When I was just down in Vegas, as an example, I met with Department of Transportation's ISO, Mr. Brown. There is one ISO for the whole department. It's a lot of responsibility for one individual. So, you know, we offer our services, as I mentioned, as a force multiplier, and bringing that knowledge and resources is quite often half the battle. I mean, individuals don't have the time to go out and do a lot of the research on their own because they're obviously busy with their other tasks. And so to circle back to is there a desire and a demand for our support, absolutely, because there's just really not enough people working and advocating in the cyber security landscape.

Senator Denis: Thank you, and I think that the vision that we had when we heard the proposal during the session was that you would be a resource to other local—you know, whether it's local police departments or even school districts or university or whatever just within the state of Nevada, that you could become that resource. And so excited to see what happens as we move forward, so thank you. Thank you, Mr. Chair.

Chairman Diflo: Do we have any other questions? If not, thank you, Shaun.

Shaun Rahmeyer: Thank you.

11. BOARD DISCUSSION OF FUTURE AGENDA ITEMS *(for discussion only)*.

Chairman Diflo: That'll take us to Agenda Item 11, and that's a Discussion of Future Agenda Items. I think I heard a couple of them come up during discussion today. So, I will open this up for anybody who wants to propose future Agenda Items.

Senator Denis: One that I just thought about as we were thinking about this, because one of my other interim committees that I serve on is the cybercrime task force that the Attorney General chairs. There may be some information from that that we may want to hear in one of our meetings. I'm not sure exactly how it would tie in, but, just the fact that we've had the couple discussions on security, cyber security, and cyber defense, there are some things that we're doing in that committee that could be helpful to us as far as informational.

Chairman Diflo: Okay, great. That's an excellent idea. And I think I heard somebody mention project status dashboard. That's probably something we want to add to future meetings.

Catherine Krause: Earlier, we were talking about all the strategic initiatives that Director Cates mentioned, and I mean, I think that, to me, needs to be probably the primary focus of this Committee, especially going into the next budget cycle and where we can, especially if we can get some of those proposals or things you're working on ahead of time so that we can, you know, give you some input from this Committee, possibly endorse some of the things that you're planning to do those initiatives, both in the things that Director Cates mentioned as well as the things that Mr. Dehnhardt mentioned and for the cyber security initiatives. It's just so critical. I think that should be the main role of this Committee, and it is really what the statute says it should be, one of the main roles of this Committee.

Chairman Diflo: Agree. Anyone else? Okay.

12. DETERMINATION OF DATES FOR FUTURE BOARD-RELATED ACTIVITIES (*for discussion and possible action*).

Chairman Diflo: Let's go to Agenda Item 12, and we discussed this a couple times. We have to get better at having the four meetings a year. So, what I would like to propose is that we set dates, at least for the next three meetings for 2018, knowing that we may have to move these. At least we can set some dates and get them on the books, and so what we're proposing is May 24th, August 23rd, and November 14th. With that, I will open that up for comments.

Director Malfabon: Rudy Malfabon for the record. Mr. Chairman, I have a conflict on that May date because the organization of the state DOTs meets that week. August 8 looked great, and what was the November date?

Chairman Diflo: November 14th.

Director Cates: Mr. Chairman, I also have a conflict on May 24th. I have an all-day board PEBP meeting.

Chairman Diflo: All right, so, reschedule the May 24th. We'll do the week before, the 17th, May 17th?

Senator Denis: Mr. Chair, this is Senator Denis down in Las Vegas. I have an all-day interim education meeting that day on the 17th, so I wouldn't be available.

Director Malfabon: I can suggest afternoon, like, Friday afternoon or I could do the morning of the 18th and just have someone else cover a meeting that I have, the Friday.

Speaker: Friday, the 18th, that works for me.

Ms. McGee: So, that's a Thursday and a Friday. Today's meeting is on a Wednesday. Wednesdays are generally better for me. I don't know how everybody else is on Wednesday. I have other board meetings on Thursdays. So, that will be a problem.

Chairman Diflo: What does the Wednesday in June, first week in June? Okay, let's everybody take a look at June 2nd.

Director Cates: No. That's a Saturday.

Chairman Diflo: That's a Saturday? The Wednesday—okay, June 6th. All right.

Senator Denis: This is Senator Denis. That works for me.

Chairman Diflo: Okay, and I'm seeing a lot of nodding here. I'm quickly closing this item then.

13. PUBLIC COMMENTS (*for discussion only*) – Chair.

Chairman Diflo: Agenda Item 13, we will revisit Public Comments. Is there anybody in the North that has a public comment? Yes, sir, come on up to the table, and please state your name for the record.

Thomas Kearns: My name is Thomas Kearns. I'm a concerned citizen. I—also an accessibility specialist as well on several boards for disability interests, and I'm concerned specifically about the accessibility of the State's websites and access for the one population that I work with the most, is the blind. I have produced and helped produce a report of five consumers that had issues with website accessibility and having the issue of, at least, in the very minimum, talking to the agencies or the divisions that were producing these websites, having a way to produce a complaint form or some process in which they can have those things remedied. What I'm proposing is if it could be a possibility to add to the next meeting's agenda, a discussion on accessibility and the statewide accessibility issues.

One last statement, I'd like to commend the EITS and their willingness to working with my group and groups that I'm working with. They've reached out, and we've created a consumer group, and in particular, Linda DeSantis' team is producing the processes that would work, and I'm hoping that it can be duplicated throughout the state, and so if that could be possible to be also on the agenda.

Chairman Diflo: Okay, thank you, Mr. Kearns. Yeah, I think we will add that to the agenda.

Thomas Kearns: Thank you.

Chairman Diflo: Does anybody want to comment on that?

Patrick Cates: For the record, Patrick Cates. I'll just thank the gentleman for his comments. I do know that EITS has been working on templates for state agencies. Most state agencies are using Ektron as the content management system for the website, and they did a series of templates for agencies to adapt for accessibility. I don't know all the details and where they're at with that, and there are some agencies that use other systems. I'm not sure what conversations they've had with them, but I know they've been working hard to get all of the agency websites compliant, and I think the templates that they design will allow that. It's just a matter of going through all the sites and standing them up is my understanding, but we'll be happy to come back and present more at the next meeting.

Chairman Diflo: Okay, thank you, Director Cates. Are there any other public comments up North? Seeing none, we'll ask for any public comments in the South.

Senator Denis: We have one public here, and she's not coming forward. Mr. Chair, just real quick while I'm on the mic, on that Item No. 11 on the future agenda items, did you just say you're going to take care of that offline and send us stuff, or where did we end up on that?

Chairman Diflo: We have the minutes being taken of everything we discussed. So, I can ask that we send out all of the topics that we went over.

Senator Denis: Sorry, not the topics. I meant 12, future Board-related dates.

Chairman Diflo: I think we're good with August 23rd, November 14th, and I believe the other date was June 6.

Senator Denis: On the 14th, as long as we don't meet in the morning, I have the tech crime meeting in the morning that day. So, if you do something in the afternoon, I should be available on

the 14th of November.

Chairman Diflo: Okay, yeah, I think we'll try to keep the meetings in the afternoon, from 1:00 to 4:00 again. Okay, so, no public comment.

14. ADJOURNMENT

Chairman Diflo: I would then ask for a motion to adjourn. Oh, okay, if we don't need a motion—I do. I need a gavel. Meeting is adjourned. Thank you, everybody.

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- Washoe County Courthouse, Second Judicial District Court, 75 Court Street, Reno, NV 89501
- Nevada State Library and Archives, 100 Stewart Street, Carson City, NV 89701
- Grant Sawyer Building, 555 E. Washington Avenue, Las Vegas, NV 89101
- And the following web locations:
 - [http://it.nv.gov/Governance/dtIs/ITAB/Information_Technology_Advisory_Board_\(ITAB\)/](http://it.nv.gov/Governance/dtIs/ITAB/Information_Technology_Advisory_Board_(ITAB)/)
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