

**\*\*\* NOTICE OF PUBLIC MEETING \*\*\***

**INFORMATION TECHNOLOGY ADVISORY BOARD**

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**LOCATIONS:**            Legislative Counsel Bureau            Grant Sawyer Building  
                                 401 S. Carson Street                    555 E. Washington Avenue  
                                 Room 2135                                    Room 4401  
                                 Carson City, Nevada 89701              Las Vegas, Nevada 89101

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**DATE AND TIME:**    May 14, 2012, 9:00 a.m.

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Below is an agenda of all items to be considered. **Action will be taken on items preceded by an asterisk (\*)**. 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 Chairperson.

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**AGENDA**

**1. CALL TO ORDER**

**Joe Marcella:** I'd like to call the meeting to order. My name is Joe Marcella. I'm the CIO for Southern Nevada and I'm chairing the Governor's Committee for Information Technology Advisory, or Advisory Board. Before we start, I wanted to read that today is May 14, 2012. We're starting the meeting at 9:15. Below is an Agenda of all items to be considered. Actions will be taken on items preceded by an asterisk. Items on the Agenda may be taken out of order presented, and I'd like -- and I'm going to propose that. 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 Chairperson. I'm going to move one Agenda item once we get through the roll call. Can I call the meeting to order? Can I ask for a roll call?

**Lenora Mueller:** Yes.

**2. ROLL CALL**

**Lenora Mueller:** Assemblyman Bobzien?

No response heard.

**Lenora Mueller:** Mr. Breslow?

**Bruce Breslow:** Here.

**Lenora Mueller:** Mr. Casazza?

**Cory Casazza:** Here.

**Lenora Mueller:** Mr. Dennis?

**Mr. Dennis:** Here.

**Lenora Mueller:** Mr. Diflo?

**Paul Diflo:** Here.

**Lenora Mueller:** Mr. Farrell?

**Kevin Farrell:** Here.

**Lenora Mueller:** Ms. Fucci?

**Laura Fucci:** Here.

**Lenora Mueller:** Mr. Gustafson?

**David Gustafson:** Present.

**Lenora Mueller:** Mr. Marcella?

**Joe Marcella:** Here.

**Lenora Mueller:** Mr. Menicucci?

**Jeff Menicucci:** Present.

**Lenora Mueller:** Mr. Mohlenkamp?

**Jeff Mohlenkamp:** Here.

**Lenora Mueller:** Ms. Parker?

**Carrie Parker:** Here.

**Lenora Mueller:** Mr. Willden?

**Mike Willden:** Present in Carson City, and I would note for the record I have to leave at about five to 10:00 to attend another meeting, so if we need this for a quorum, on notice.

**Lenora Mueller:** Mr. Chairman, that constitutes a quorum. Back to you.

**Jeff Mohlenkamp:** Mr. Chairman, Jeff Mohlenkamp once again for the record. I have to leave with Mike to the same meeting, so if there's a desire to -- I don't know if losing us loses a quorum or not, but we're both going to be leaving at about ten minutes to 10:00.

**Joe Marcella:** Does that?

**Lenora Mueller:** You would still have a quorum.

**Joe Marcella:** I would still have a quorum. Thank you.

### **3. PUBLIC COMMENTS**

**Joe Marcella:** Agenda Item No. 3 is for public comment. Are there any public comments in Carson City or in Las Vegas? Hearing none, seeing none...

**Laura Fucci:** None here. There's none here. No.

**Joe Marcella:** Okay. None here. I'm sorry, I couldn't hear you.

### **\* 4. APPROVAL OF MINUTES: March 26, 2012**

**Joe Marcella:** Approval of the minutes for our March 26, 2012 meeting. Are there any changes or revisions for the record of March 26, 2010 minutes? If none, can I get a motion to approve the minutes as submitted? Motion?

**Unidentified Male Voice:** I move to approve the minutes.

**Joe Marcella:** Second?

**Unidentified Male Voice:** Second.

**Joe Marcella:** Thank you. Approved. I'd like to move...do we have to, I'm sorry, vote?

**Unidentified Male Voice:** With a motion and a second, we should still vote on that.

**Joe Marcella:** Okay. Thank you for coaching.

**Unidentified Male Voice:** Thank you, Vice Chair.

**Carrie Parker:** Mr. Chair?

**Joe Marcella:** Could I have a vote? Yes?

**Carrie Parker:** Carrie Parker. I just have a comment. I noticed sometimes in the minutes it would say 'unidentified male voice' and I'm sure that it would probably help whoever makes the minutes if people would say who they are before they speak.

**Joe Marcella:** And I'll try desperately to ask for everybody to identify themselves for the minutes. Okay. Can I take a vote to approve the minutes? All in favor?

**Group:** Aye.

**Joe Marcella:** Are we actually using the voting buttons? No?

**Lenora Mueller:** Not anymore.

**Joe Marcella:** Thank you. Okay. I would like to move Item 9 out of order. I'd like to move that in front of Agenda Item No. 7. Okay. Open comments from the Chair.

## **5. CHAIRMAN'S OPENING REMARKS**

**-Joseph Marcella, CIO, City of Las Vegas**

**Joe Marcella:** I wanted to remind everyone that this Board is assembled for advisory purposes. There's issues related to IT, interdepartmental, consolidation, integration, policy planning and standards. We also have the opportunity to review strategic plans and review and prepare for budget. I intended to focus on a few things, and I think what we're going to look at today is the pain points, the issues that the division is having. What should be funded or fixed, large -- I'm sorry, long and short-term items. And I've heard in the past that these meetings have been had. There has been an opportunity for Boards in the past to give the division direction and it's time again to go ahead and do that, but I think what I'd like to do this time is make sure that we're not only focused, but whatever is listed and whatever moves forward through the Board actually gets accomplished.

David attended the NASCIO conference on May 8<sup>th</sup> through the 11<sup>th</sup>. What I'd like for David to do is, if he would, summarize that conference. And if you've got it in front of mind, compare that with what was priorities last year of the NASCIO conference.

## **6. NASCIO REPORT**

**-David Gustafson, CIO, Enterprise IT Services Division**

**David Gustafson:** Thank you, Mr. Chairman. For the record, my name is David Gustafson. I am the State Chief Information Officer. I'm excited to be here today to give you a quick, hopefully a quick, debrief last week where we spent -- I flew out Monday morning at 6:00 a.m.

and came back Friday at 9:30. It was a week in Baltimore and D.C. for the National Association of State CIOs where we had a lot of really interesting topics that I'd like to talk to you about.

I'd like to first start off and say this was probably the most productive and informative NASCIO event that I have been to yet. I'm not sure exactly why, but I feel like I accomplished more this time than I normally would. The major themes this year were mobility, cyber security, cloud, OMB A-87, which is our federal regulatory requirements and virtualizations of desktops and applications. However, I would say that cyber security was, by far, the biggest topic discussed and that sort of goes back to what the Chairman was noting is that last year NASCIO's top ten priorities, you'll see that security was actually ranked number seven. What I'm seeing is that it's moving up in the list.

But let me first start off with cyber security. So NSA had a special briefing for about 20 state CIOs. And we were brought to a place that doesn't exist to talk about topics that we can't talk about under penalty of death. Yes, I had to actually sign paperwork that said it is a death penalty to discuss. This was higher than top-secret clearance. It was actually making the Homeland Security folks really nervous about even telling us all this information. And while the details are not really important for this conversation, but what is important is that why they would be doing that, and the only thing why -- I can think of why they would be telling us this information is someone thinks we're not winning the war on cyber, and so we are woefully inadequate to address the cyber threats of today and tomorrow.

And I come back to thinking about some of these things, so we went through a top-secret part of the discussion and then we went into what can we do about it and sort of how these actors operate. And essentially what their recommendation was we build infrastructures and security systems around what's sort of like an egg. They have a hard outer shell and, yeah, it's tough to get through, but, you know, once you get through, it's all nice, soft and gushy. And so we need to be building systems, infrastructure, networks like a honeycomb so that they're harder for things -- once you get on the -- once you crack it, it is very difficult to move around. The bad guys know this. Some of the states, even states around us, are very good at building these kinds of systems and networks and they have a lot of experience doing so and are funded appropriately to do that. We are not.

I would also add that I had many conversations with Dick Clark, who is the CIO from Montana, and what we'd like to do is propose a regional cooperation between states to address cyber threats. It sort of became evident to us that the feds are great to come in and help clean up the mess once it's done, but for the most part, they're not going to be there to help you when it's happening or to prevent it because they have their hands full already. They have their own problems they have to deal with.

So we start to look at how can we, as states with limited resources, do it on our own, let alone in a federated IT model like we have here at the state. How do we then reach across the aisle to the

other states around us, and how do we build a team, a response team, best practice team for the region so that we can work together to get the economies of scale even from the region, not only from states, just as -- from the region. So we talked a little bit about that.

I also want to say we met with, also on the security side, we met the senior leadership of Symantec. Chris Ipsen and I, who is the Chief Information Security Officer for the state -- and recently we had to purchase their Altiris product and their Symantec Endpoint Protection, so we're -- in the Department of Administration, we're fully deploying the Symantec Endpoint Protection, which is antivirus and host intrusion, on the desktops and we're also implementing the Altiris product, which is going to allow us to do third-party patching and Push patches, it's going to do inventory management, asset management, things like that, license key management in the Department of Administration. I exclusively say Department of Administration because this is not unique to the state government. This is only now being deployed in the Department of Administration. The really neat thing about that is what we do now is we have all of the endpoints from all the divisions and administration pointing back to a common console back at our help desk where if someone's PC has a virus, it automatically alerts the console so that the help desk can be proactive in managing that virus or that intrusion proactively rather than reactively. And that's gonna help improve customer service. It's gonna make the network more secure. And it's also gonna give us a better overall picture of what's actually happening. We can then go back and run reports on where the virus is coming from, where are we finding intrusions coming thing, those kinds of things. So it's really important that we really start to work together in the state as best as we can because these -- we don't need to be the egg, we want to be the honeycomb.

Symantec was really supportive. In fact, we told them about a lot things we want to do. We also want to do application white listing. We also want to restrict user access to systems and things that they don't need access to. This is all part of that building the honeycomb. If you don't allow people to get to the systems they shouldn't be, then you're theoretically increasing your level of security instead of just having a free-for-all network. They were actually very excited about it. In fact, we met probably about 45 minutes or so and one of the gals that we met was the vice president of Symantec and she actually offered up to send their architects over sometime this summer so that we could discuss our long-term plans versus what they're doing alongside with NSA and some of the other companies, or the other three agencies to make sure that our vision was aligned with what they're doing, and their vision is aligned with what we're doing. So it was actually a really informative conversation.

Also, we have applied for about a \$2 million grant I believe from the NSTIC which is the Society for Trusted Identities, in which we're gonna start looking at identity management, starting -- I think this one was largely around gaming as we sort of look at online gaming and things like that. How do you know who's on the other end of wire, how do you validate that user is a user and not a computer and not a 14-year-old kid or something like that, so we've also

applied. They offered up a letter of support, so we wanted to thank them personally for their letter of support for our NSTIC application.

We also met on one of the days, I think it was Wednesday, we went to -- Jim Earl and I, Chris Ipsen and I went to D.C. where we actually met with Tommy Ross who's from Reed's office. We were talking a lot about the NSTIC grant which he's offered up a letter of support from the Senator's office. We also talked about cyber centers and cyber legislation. And I hope I'm not going out on a limb here. We were concerned that there are two versions of cyber legislation, one coming from the House and one coming from the Senate. They're very different bills. We weren't sure they were ever gonna reconcile them and he seemed to think that there was going to be a reconciliation and that there would be something passed probably this summer which will also include probably FISMA reform, so we were actually really excited to hear that because we have to do more in the cyber world, not less.

Let me move on to OMBA87. So every couple years we have federal paybacks for some reason, and now in the enterprise IT services this year we're facing a \$1 million payback in our telecommunications group, and a couple years ago we had about a million dollars in our networking team, and so we keep thinking that we're not doing something right. Something is just amiss here, and the feds are really peculiar about how you handle their money, and the whole OMBA87 circular how you handle their money and how you spend it and everything, and so we keep thinking maybe we're just clearly missing the mark, or is the system just built such that everybody is paying them back.

So (inaudible) started asking around, and some people just said, hey, you know, fed paybacks are just a way of life and just don't worry about it, it's just the way it is. And we finally got to -- I had a couple of those and I got to one gal from Alaska. She was I think the deputy director of Alaska in the IT group, and she said, no, no, no. She goes, that's not true. She goes, there is a way. She goes, it's just you have to understand the rules of the road. You can't just go firing off like you do at any other, you know, agency or internal service (inaudible). She says you have to really be careful about how you do it, but there is a way not to pay the feds back all the time.

So she sent us a couple (inaudible) and some things, and now we're engaging with her to find out more about this. But what we're gonna do is we're gonna actually dig into the OMBA87 circular regulation, it's about 25 pages, and really figure out what's going on, what are we doing wrong, and how do we manage their money such that we don't actually owe them and have to pay them back money. So I just wanted you guys to know that this seems to be a prevalent problem among NASCIO among the states, but that I've been told that there is a way out of this box without paying back the feds all the time and it seems to be pretty standard fare for most people. I'm not sure exactly why, but it is.

I'll talk a little bit about mobility.

**Bruce Breslow:** David, you're talking about grant funds that have not been spent that you need to pay back, is that -- no? Where are you going then?

**David Gustafson:** For the record, David Gustafson.

**Bruce Breslow:** And I'm the -- my name is the unnamed voice, Bruce Breslow.

**David Gustafson:** That was Bruce Breslow, for the record. No, that's not what I'm saying. So what happens is, as we establish rates for services, so let's just use telephones for example. We'll establish a rate for our telephone services which will include depreciation and the cost to deploy the service. And then what'll end up happening is years later we come to find out, oh, well, you owe the feds, and there's a whole reason why the feds have to do a little bit of accounting that's a little bit different than the way states do it. They see things in here that we don't see, and we depreciate assets in different years than the feds, and so it looks like on paper sometimes where we have overcharged our customers when in fact that's not really true. It's just that our view of the lifecycle of the equipment or the service is different than theirs. And so I want to -- go ahead.

**Jeff Mohlenkamp:** Mr. Chairman, if I can. Jeff Mohlenkamp, for the record. And part of this is something I'm very familiar with because it applies across my department. And when we are charging customers, the feds indicate that any balance that you have essentially is accrued as accrual of interest. Right now under our statutes, the interest accrued goes to the general fund as opposed to within that agency, but the feds are looking at that money and saying that's part of your reserve that is available for that agency to do their business. So we have a structural problem that we're looking to fix in the next session. I think that David might be keen to some other ideas that Alaska might have that are above and beyond that, but that's part of the picture is the accrual of interest, and that interest actually residing within the general fund as opposed to his reserve balance or other agency reserve balances.

**Bruce Breslow:** This is Bruce again. I understand that. I'm just curious why we have to send money to the federal government back rather than use it in your agency or roll it over to the general fund. Is there a tax consequence, is that what you're talking about? Because we don't -- we keep getting extensions on grants so we can finally spend the money, and if we don't, then we repay it, but I'm not familiar with what you're talking about here.

**Jeff Mohlenkamp:** In this particular setting it's not grant funds, it's actually charges to the customers that use the services.

**Bruce Breslow:** Cost allocation?



**Jeff Mohlenkamp:** It's a cost allocation principle, yeah. And the feds, once they deem your reserves to be too high, they will indicate that you're sitting on federal dollars and that the interest that you accrued has to be paid back to the feds. That's the general concept.

**Bruce Breslow:** Thank you.

**David Gustafson:** So for the record, David Gustafson. And so the way they look at it is a little bit different than the way some of you guys actually look at it, and also the depreciation is different where you can only -- I'll give you a quick example of that. If we buy something, say we buy a new telephone system. Well, we have to pay all that cash up front, but the feds say you can only depreciate it say 25 percent a year. But in year one we had to pay 100 percent of the equipment, but we can only depreciate 25 percent of it, so where's the other 75 percent of the money? They'll say, well, you must have overcharged our customers because the other 75 percent you pay for it somehow, and so if you say yes, but if you look at it over the four years, then it all zeroes out in the end, but they don't look -- they look at it in really about two-year windows. So we have to really be careful. OMBA87 is the federal money.

So anyway, we're looking into it. It's a challenge that many states have that we understand can be solved. There is a way out of this box, but it's not an easy one, so we're looking into it.

**Joe Marcella:** Joe Marcella, for the record. It sounds like there's -- is there a possibility there's an accounting rule that's being changed and/or being looked at so that's no longer an issue? Because what I'm hearing is you're entirely (inaudible) and that's a pass through for the actual costs, and the actual costs are based on the lifecycle of a piece of equipment and/or the overall software depreciation. So my thought is, is that something that needs to literally be revisited, and it's a problem today, is it possible it won't be a problem tomorrow?

**David Gustafson:** That's correct. For the record, David Gustafson. And that's exactly why we want to really dig into this a little bit more. We just want to make sure that what we're doing is exactly what the feds expect us to do so that we don't end up in these situations. Because if they only look at two-year windows, the first two years, well, you're always upside down because you had to pay for it. You know, the only way we really think you can get out of it right away is if you finance everything for the exact term of the equipment lifecycle such that your depreciation and your payment are the same, if you would, over the year. So we're looking at because it's complicated. It needs to be resolved because we can't continue to just keep going down these roads of fed paybacks all the time, so I just wanted the Board to know that it is a concern of ours. It is something we want to address. And we're gonna spend more time on the OMB than we probably want to, but we're certainly dedicated and we want to resolve this issue as soon as we can.

**Paul Diflo:** For the record, Paul Diflo, and I apologize, just for my clarity, this is a situation that only exists in capital dollars of the depreciation lifecycle. If you were to expense for a solution, you wouldn't have this issue; is that right?

**David Gustafson:** For the record, David Gustafson. Largely that's true. As long as the feds do not think you're overcharging their customers meaning the DMVs, the HHSs of the world, the Attorney General's office, any of those. As long as they feel like we're not overcharging them, then we believe we can remain in positive territory. It's just that they get a little bit sensitive, if you will, when they think that we are leveraging federal money for capital investments, or we're taking their money and putting it into reserves and using it for other purposes. They want to make sure that the federal money that's coming through the programs is spent specifically to support those programs only, and so they have all kinds of regulations and rules around how you spend the money because they want to make sure that it's spent only in the channels that it was given essentially is what it is.

**Joe Marcella:** For the record, Joe Marcella. David, have you gone through that kind of a federal audit so far, and have you paid back funds?

**David Gustafson:** For the record, David Gustafson. Yes. As a matter of fact, that's why I said every couple years or so we're always facing down federal paybacks one way or another.

**Joe Marcella:** (Inaudible) material to your operations?

**David Gustafson:** It has in the past, yes. I think maybe about five years or so ago we had about a \$1 million payback in our network group, and so now we're facing another million dollar payback in our telecommunications group, and so we just fundamentally think that the way we're handling this, the way we're accounting for it and budgeting for it and such, it's just not the way they want us to do it. So we want to make sure that we're playing by all the rules so that we don't end up out of the box. But like I said earlier, it seems that a lot of states just go through this process all the time and they just pay the money back and move on, zero it out and start again. But we want to make sure that we put programs in place that we don't end up in that territory all the time.

**Joe Marcella:** For the record, Joe Marcella. Would you continue with the Agenda?

**David Gustafson:** Okay. Thank you, Mr. Chairman. So we had a lot of discussion around OMB rules. In fact, several of the panelists from some of the presentations were from OMB where they continued to express their desire to have flexibility because they realize that even on the federal level that people are consolidating, money is getting mixed up. But what we're seeing in action is that they are still very rigid on how the money is coming down and how they want it spent. Even though there's a lot of talk and there's a lot of discussion around all this

sharing and such, we haven't seen any of the regulations really changing that would actually permit more of the intermingling of the funds, but they're talking and that's a good start.

Next what I want to talk about is mobility. As many of you know, here very soon in the next couple years, mobile operating systems, your iPads, your Droids, all that kind of stuff are actually gonna exceed PC operating system sales, which gets us to an interesting position because how do we secure those pinpoints when most of them don't even have anti-virus protection just to start with. A lot of them are very open frameworks and allow people to just create applications and things like that, you know, in their garage to do really cool stuff and there's games and all this. They're really a consumer device. They really weren't built for the built for the business environment. So how do we adapt to managing those devices and securing them in a world of sophistication of cyber threats and knowing that these devices will eventually replace PCs to a degree where they will have sensitive information on them, or certainly access to sensitive information. So we have quite a bit of a challenge here among the states as to how do we address that and deal with it, because states are the big soft squishy targets because states require you to provide information to them that most citizens probably would not provide to other people. When you go to get your driver's license, you have to provide sensitive information. When you apply for health and human services programs, you have to provide this. When you get unemployment benefits, you have to provide sensitive information. So how do we secure those environments and ensure that they're uncompromised through this transformation of a PC environment to a mobile environment? So that's a big discussion around how these things are going.

I also want to talk about Cloud. So Mr. Earl, who is our Chief of Staff, was invited to talk about jurisdictional issues on Cloud computing. And essentially, I'm gonna boil this down, and Jim if you're watching, I hope you don't get upset with me for trying to get to the essence of it, but if we here in Nevada push data to a Cloud, we push state data to a Cloud that's in a data center in say Virginia, what happens if the data is compromised in Virginia? Or what if something happens to the data in Virginia? So then where do we litigate that? Who owns the data under what state's laws apply? And so these are a lot of discussions that haven't been made. What if in the case of some of the major Cloud providers, the data is all over the country and nobody even knows where the data's at? Then what happens? What if it happens to be in Canada or Mexico or somewhere overseas? What happens to the data? Where do you even litigate that? How do you even track these guys down?

So there is all kinds of interesting challenges that's happening around data, and a lot of the state's now are saying that's great, we'll leverage Cloud technologies, but the data can never leave the state. So it has to be in the state somewhere, data centers, you can have as many as you want, but they can't leave the state. Well, that's kind of hard because when you look at the concept of Cloud, it's such that it is meant to be put all over the place. That's the whole concept of it is that it's available, it's redundant (inaudible). Mr. Chairman?

**Joe Marcella:** For the record, Joe Marcella. I understand that the state has had conversations with other jurisdictions for government Cloud which actually alleviates that issue; is that correct?

**David Gustafson:** For the record, David Gustafson. It does not alleviate it, but it is a concern that we have. If we push data to a Cloud, even if it is a government Cloud, and it gets compromised in Virginia, we still have the same problem. So do we litigate it in the Virginia court system or a Nevada court system or whose laws apply? Is it Nevada laws because it's our data, it just so happen to be in the Cloud, or do Virginia laws apply? Or what if it's in multiple states, then what happens? So we're -- it's a really interesting topic. I think it was very well received, the challenge that was brought to the NASCIO membership. And from what I understand, I was actually moderating a panel on cyber security at the same time this one was going on, but from what I understand this was about 85% full on their panel which was probably about 75, 100 people probably, and it was a very informative discussion on what actually happens, and quite honestly, there are no answers, at least not at this point. So they're churning and working on it.

**Kevin Farrell:** Kevin Farrell, for the record. Was there any discussion about how the private sector would deal with this issue today? Anything to be learned from there?

**David Gustafson:** They do. For the record, David Gustafson. As a matter of fact, it's a little bit different when you're in the private sector, because when you push to the concept of the Cloud and something happens in another state, then what happens is they usually hire private counsel in that state to litigate. If you're at IBM and, you know, your headquarters may be in New York, but you have satellite offices everywhere and they hire attorneys all over the country, and that's just kind of a normal part of business. For states where we don't have that option and we are the entity that owns the data in this case and it is resident information data, then what happens. See it's different when you're a business because you can buy insurance, right, and things, and you can just say, hey, we'll buy a special insurance package that kind of mitigates that risk a little bit. But when you're the state, you don't really have that kind of an option. It's not really the same animal. Did I answer your question?

**Kevin Farrell:** Somewhat. The Virginia example, it sounds like the question where would the litigation occur.

**David Gustafson:** Right.

**Kevin Farrell:** In the private sector, they can hire outside counsel wherever they need it. Does that mean it tends to be in Virginia or wherever the Cloud is managed rather than the owner's location?

**David Gustafson:** Right. David Gustafson, for the record. Let me say this. Even with AAA, I'm sure they have data centers all over the country, and they pick locations for data centers based on, you know, geographical regions, earthquakes, and then lowest cost, right? So when you look at that decision, litigation is usually not one of the top driving forces or factors in why they choose where they're gonna put data centers. And they know that when they leave their home state that that's just a part of doing business. You know, they have to adhere to the rules of the road in that particular state. Whereas states, we don't typically take our data out of the state because we need to have control of the data because we can't lose it. So in the case of a company, they buy insurance for those things. And it's not unlike when UPS drops the backup tape off the back of the truck and it just goes bouncing into the ditch somewhere and they just say, well, we bought insurance for people for these kind of situations, we'll just go ahead and use the insurance to pay for that. Whereas the state doesn't really have that option to lose the data, and so we have to be really careful calculated about how we do things, and in this particular case where the data is compromised in another state, what happens. Because we -- it's our data in our state that we pushed to a Cloud and now it's compromised somewhere else. What if Virginia, for example, has really lenient laws, or what if they have really strict laws and then our laws are really lenient, I mean, how do we -- how do you juggle that? It's a little bit different when you're a private company.

**Joe Marcella:** For the record, Joe Marcella. David, in all of that conference and all of those conversations, was there any indication that some of this had been tested in court already and some resolution has already been...

**David Gustafson:** For the record, Dave Gustafson. I do not believe so. Like I said, I wasn't able to attend this particular briefing, but what I think is happening is that there was a big push to the Cloud over the past couple years and now people are sort of trying to sort it out and they're thinking, hey, maybe we should, you know, from a state's perspective, we need to really get some of these legal things ironed out before we do that. And this is typical with a lot of the IT lifecycle, right? IT has got some grand fandangled new contraption, right, and it enables the businesses to the Nth degree, and so everybody runs to it and then you realize later on, hey, wait a minute, that's probably not the best idea, right? Or we need to put controls around that so that it doesn't get out of control. This is just certainly one of those that could create a very large mess if we're not careful. And further, to use the example of the data centers, what if you push to a Cloud provider and the data is compromised in another country, Mexico or Afghanistan, or pick your favorite country, you know, Europe, that's fine. So then what happens? Now you have the State of Nevada personally identifiable information that was pushed to a Cloud to save some money, right, and to leverage the Cloud, and now it's been compromised in Eastern Europe. Now what happens? Where do you go? Whose laws apply? So it's just a really interesting conversation.

**Paul Diflo:** For the record, Paul Diflo. Just want to offer up, we work in a highly regulated environment at IGT. Our general counsel insists that before we go into an agreement they specify where litigation will take place or we don't go into the agreement with that supplier.

**David Gustafson:** For the record, David Gustafson. And that may be some of those things that the states are kind of working out now.

**Joe Marcella:** For the record, Joe Marcella. Cloud technologies are fairly straightforward. There are three kinds, that's infrastructure as a service, there's platform as a service for testing, and then there's software as a service. Many of the government organizations today that have had problems with lack of standards, inconsistency across the divisions and so forth have thrown essentially their email and some of the suites over the fence. What you're talking about is more towards the business applications and less towards those kinds of utility applications. Am I correct?

**David Gustafson:** For the record, David Gustafson. Yes, I would agree with that.

**Joe Marcella:** Thank you. Could we move on to your next presentation item?

**David Gustafson:** Yes. So lastly, I want to talk about consolidation of virtualization. There were some topics around -- not so much about server and infrastructure, those things are already -- they've debated those enough. They're really now around virtualizing desktops, the virtualized desktop infrastructure and virtualizing applications. And what we're finding is that a lot of states have pilots on their virtual desktops, not really for reasons of saving money, but for reasons of managing the data, making sure that the data never leaves the data center. It's more of a security thing. Also around reducing their -- actually I'm hesitant to say reducing. Changing the way their support structure is built such that they have a centralized support mechanism in place where if you have a virtualized PC and you have a problem with it, you have somebody remote into it and kind of fix it up and, oh, that one's not working, great, we can format that one, give you a brand new one on the fly, and they don't have to leave anybody -- nobody has to actually leave their seats. So they're changing the way support is actually handled which allows you to go ahead then and look at outsourcing opportunities as to reducing the cost or being competitive with the private sector. So it allows you to scale up. It also gives you an opportunity to understand your cost structure, and it also affords you the opportunity to outsource if you so choose to do so. So a lot of it was around desktops, virtualizing the desktops now and applications.

What we're seeing in the mobile side, at least from the state perspective, is while a lot of states are moving towards building applications, Apple applications and Droid and things, what's actually happening now is that because states are inherently slower to the game, what we're doing now is we're moving ahead to the HTML5 which is more of a web-based concept for services delivery. So they're kind of skipping a lot of the application part of the lifecycle, if you

will, for a mobile. So we're seeing a lot of that where we know we're behind the curve so they're kind of the skipping the whole application thing and we going straight to just mobile web so that anybody can get it from any browser on any platform which is sort of the beauty of the HTML5.

And the last thing I had on my notes here was more specifically tailored for the Governor, so I'll go ahead and leave it at that. Oh, I did want to say one last thing. As part of the NSA debrief, this is unclassified so I can go ahead and say this, there's a process by which a lot of the bad guys get to your data, and I just want to just run through it real quick. I just want to tell you so it's on the record. They perform reconnaissance on your network. They find an initial exploit by probing and things like that. Once they're in, then they phone home, if you will. They install tools and establish a persistent connection. They exploit accounts. They'll map your network and then they move laterally, and then they'll exploit the data. So that's why building the concept of a honeycomb doesn't allow the bad guys to move around in your network as easily. So while nobody ever thinks that security is an absolute, it is certainly -- we build in layers of defense not unlike an onion so that it just makes it more and more harder for people to get through and we can put probes in certain places that -- to sort of identify some of these.

Anyway, with that, I'll go ahead and I'll stop talking now and go ahead and, Mr. Chairman, if there's any questions, I'd be happy to address them.

**Bruce Breslow:** Mr. Chairman, Bruce Breslow, for the record. I know we're gonna lose two members, I just had one more follow up. Did anybody at that conference talk about Windows 8 since a lot of governments are hesitant to go to Apple products, and Microsoft is changing to a touch screen for their basic computers starting this summer, and how we're so many years behind in state governments with computer equipment, and they're gonna be selling a whole different ballgame starting this summer, how do we deal with that as a state?

**David Gustafson:** For the record, David Gustafson. No one mentioned Windows 8 the whole time I was there.

**Bruce Breslow:** There's gonna be a big oh blank moment coming up this summer and fall.

**David Gustafson:** I think everyone was sufficiently scared with the security issues that they couldn't think to Windows 8.

**Bruce Breslow:** Okay. Thanks.

**Joe Marcella:** Before we go to the next Agenda item, I'd like to summarize what I heard, David. The primary issue for NASCIO this year has been cyber security. Your comments are, and apparently NASCIO's comments are that infrastructure, big data and Cloud are not necessarily cures but ways to facilitate the issue with cyber security. Apparently the bad guys

are after us and they've been aggressive, and we've been in defensive mode, so what I also heard is that we need to change that paradigm where we're literally prepared and structured to either fight back or at least secure. The other thing I heard was is that not only do we need infrastructure, but we need standards, and, Bruce, I think that's where he's going as to the next level of technology and that being standard across the board so that there's an equal deployment, and you had mentioned that was virtualization. The other thing I heard was consolidation. That means that consistency across the board happens when there's a single administration. And the last thing I didn't hear, but that you hinted at, is that this all has to be funded.

**David Gustafson:** Mr. Chairman, for the record, David Gustafson. That is correct. I would only change one thing, that when it comes to cyber security, we are big, soft, squishy targets with a lot of good juicy data, and we just need to make sure that we are doing everything that we can to protect the data. That includes regional partnerships, that includes collaboration with other state, whatever that is, is what we have to do. Not so much because we want to go on the offense per se, but to make it as difficult as we can as possible without choking the business or disabling the business to secure the data. And so I would say in the world of cyber, there is a lot more we can do. There is a lot more standardization. There's simple things that in a decentralized model we can't ensure, such as simple things such as patching, you know, passwords, resets every night. I mean, there's just simple things that currently under our current structure, every division or agency who has their own directory structure has to be responsible for making sure that that's changed, those things are changed and that the basics are covered. We can't ensure that that's happening in a decentralized model.

**Laura Fucci:** Excuse me, I have a question. This is Laura Fucci, down south. I was curious, Dave, in your secret death penalty, behind-the-doors meeting, did anyone bring up or was there any discussion around part of the issue being that people don't understand the dire straights that we're in with the security threat and making information more available so that people understand that there is a war on cyber security and we're losing the war and making information more readily available so that we can all kind of participate in this?

**David Gustafson:** For the record, David Gustafson. I think that's exactly what they were trying to do. I think they went over the top with a lot of the details when they didn't need to, but I think they use it as a shock value to wake up people, to let them know these things are real, the bad guys are out there and they're very good. They're very sophisticated and they're doing things that would be very, very difficult to overcome. And so I think you're absolutely right. They're trying to wake us up and trying to get the machine moving that we have to do a lot more than we're doing.

**Laura Fucci:** Do you think they'll make information more available so that it's not a death-penalty discussion and it'll be generally known what's happening?



**David Gustafson:** For the record, David Gustafson. I certainly hope so. I don't think that -- and they did leave us with, as part of the unclassified, you know, a whole bunch of stuff on how to, you know, secure your network and some of the things that we can do. And I think what they're trying to say, in fact, some of the conversation came up with Homeland Security money, right? There's a lot of money that's given to states through Homeland Security. I guess they're having a difficult time earmarking specific things for cyber. Instead what we find is, you know, a lot of money is going -- is being spent in other areas other than cyber even though the FBI director on public record stated that cyber was the number one threat to the United States of America. So even at that it was the Governor's recommendation that cyber be funded number one, so it's priority, but through the Homeland Security Commission, you know, things kind of go a different way there sometimes. And I'm not here to really say, you know, what to do at the Commission or anything, I'm just trying to say that we have to do more. We have to be diligent on security. We have to fund it properly and we have to put in standards and infrastructure and make it as difficult as we can for the bad guys.

**Joe Marcella:** For the record, Joe Marcella. I think this is a two-prong attack. What's happening in the communities are is we're serving the data up today basically to service the communities, and from a government perspective, we need to open that up a little bit more, bring your own device, if you will. On the other end of it is that we've always been vulnerable to attack from other countries as well as within ourselves. So the truth of the matter is, is cyber security is a priority and it's a priority for those two reasons. We need to continue to open ourselves up for a data exchange, and on the other end of it, we need to protect that data from attack from the external folks.

**David Gustafson:** And, Mr. Chairman, if I might add to that, that is absolutely true, but what we don't provide is personally identifiable information to people on the Web. We want the government to be more open and more transparent and see how the budget's working and all that stuff, but we don't post personally identifiable information. We don't post social security numbers and addresses and driver's license numbers and all this kind of stuff on the Web. So there is a part of the government that absolutely needs to maintain its transparency, and then there's another part of the data that we keep -- that we have to do everything we can to make sure that the data is safe. So there's definitely a divide there in what kind of data we want to present to the public.

**Joe Marcella:** For the record, Joe Marcella. Thank you.

**Paul Diflo:** For the record, Paul Diflo. Does the state have a data loss protection system, and is the data classified is part two of that question?

**David Gustafson:** The answer is no and no. For the record, David Gustafson. As a matter of fact, I was just having lunch with some of the Symantec guys maybe a couple weeks ago, and they're gonna bring their data loss prevention guys out to talk to us about it. Again, it's really

difficult because the way we're currently structured is that we have some of the data in the central data center under, if you will, Enterprise IT Control, loosely termed control, and then you have other agencies who are kind of doing their own thing. So the way we're built right now, if we really wanted to have a real robust plan, we'd have to do it with 12 or 15 people together, and I don't know if you know anything about getting that many people in one room, nobody ever agrees on anything, so that's why the government is so slow and lacks the ability to be flexible and agile is because there's so many cooks in the kitchen, if you will. So we do not have a really robust data loss prevention plan, but I agree we do need one.

**Paul Diflo:** Yeah, if we're considering funding, I mean, as you pointed out, Symantec has a product called Vontu. And if you've already got Altiris and their end point protection, you have economies of scale, he might be able to get that at a real good price. Thanks.

## **\* 7. IDENTIFICATION OF PRIORITIES, STRATEGIES, & TECHNOLOGIES**

**-Joseph Marcella, CIO, City of Las Vegas**

**Joe Marcella:** Okay. I'd like to move on to Agenda Item 7, and this would be identification of priorities, strategies and technologies. At the last meeting on March 26, I made a list of what I heard everyone tell me on the panel as to what they thought -- on the Board what they thought were pain points, issues that needed to be resolved. Application lifecycle was one of them. Essentially for those folks that don't know what that is, essentially, applications start to get a little old and they need to be either revisited, upgraded or moved to the next level of technology.

Consolidation seemed to be on everyone's mind. Infrastructure and standardization, capacity, security, vendors as an issue, and the management of the purchasing of software, and portfolio management was hinted at but not specifically mentioned. In the absence of a overall strategic plan, I think it's the Advisory Board's responsibility to help with that. So I took NASCIO's, if I can find the document, there it is, sorry. I took NASCIO's document from last year and part of why I wanted to hear from David, and it was opportune to have David actually attend NASCIO during the 8th through the 11th in Baltimore, was to see if any of the priorities changed, and David indicated security had moved from seventh to number one.

NASCIO last year -- or actually, they meet every six months, thought that number one was consolidation and optimization, but consolidation standardization is what that really means. Budget cost control, and that's because everybody was suffering under the current economy. Healthcare was second, and I skipped that because I haven't heard that yet. Cloud computing. Now, Cloud computing, as I mentioned before, has three prongs. What Cloud computing really means is it's outsourcing, or its strategic sourcing according to business application, as well as infrastructure that can be served better by someone else, but, David, you did indicate that data management tends to be an issue with that, or at least it's a consideration. They admit they had

shared services. Shared services in my mind is adjacent to Cloud computing, because that's what I was hinting at when I talked about a government Cloud and the ability to consolidate multiple government organizations for using the infrastructure for contingency planning and/or excess capacity management. But to me, it's a priority and it goes right along with standardization and consolidation.

Security risk was seven. Broadband and connectivity, that's just a capacity issue that was mentioned before. I would imagine that capacity, when we're talking about the citizens, idiosyncratically they're using our systems today, will probably outstrip what we're capable of delivering faster than we're able to upgrade. The legacy of modernization was again the application lifecycle that we're all suffering through in many of our organizations. It's really tough to stay upgraded in something as big as Oracle when it runs across the enterprise as well as SAP, because everyone uses those applications in their own idiosyncratic way.

And then the next level of priorities were more towards the technology, and believe it or not, they dovetail into the strategic priorities in the first place. So again, I struggled trying to figure out how we're absolutely going to address what our focus is going to be for one, to get prepared for budget, and that, like I said, it's an absence of what David might have as a strategic plan, and what David might need to bring to the legislature as to what his budget should be. I would imagine that in conversations with NASCIO and conversations with this Board, there may be some adjustment as to what you thought you would go to the legislature for from a budget perspective as well as you already preplanned.

So there's a couple of questions I have. One of which is, David, off the top of your head, could you start to talk about, one, the applications that you are responsible for, and then, secondly, what really were you going to go to the legislature for funding for, because this Board is probably going to select three to five items that are priority across the United States, and really obviously priority for the State of Nevada.

I also heard in a lot of conversation that the State of Nevada has got some catching up to do, both with fragmented systems, separation of the divisions where sharing could possibly be leveraged, and standardization across the board. So, David, if you would.

**David Gustafson:** Well, you have a lot of questions in there. Let me see if I can start, and I hope I don't get in trouble for this one, but soon the Governor will come out with his top initiatives. That could potentially change what our budget requests will look like. In the absence of that information, we are moving forward with, you know, consolidating infrastructures where possible, collaborations, synergy, shared services, those kinds of things.

We're currently working on a plan with the Department of Public Safety to potentially consolidate their IT organization into Enterprise IT Services. I have a 50-page document that I've been drafting that I'll be finalizing here very soon. Once I complete that document, I'll be

working on the strategic plan. I do have some things that I've been working on, probably over the last couple years, and so I think that putting together a real strategic plan won't take me a whole lot of time, but it's something that I do need to sit down and actually complete. The one that we have out there now is -- I don't want to say it's a bit dated, but it is a bit dated, and it's not the way I want to see it. The previous administration didn't put a whole lot of emphasis on the strategic planning process, where I see that as a valuable tool that we need to have to move forward. It'll help us to align the IT organization with the business needs of, in this case, the government. So I'll be working on that as soon as I finish up the DPS document that I'm working on.

Let me go into some of the applications. And it's a performance-based budgeting process this time, so we're actually gonna run two budgets. I don't know if Jeff had mentioned this or not. We're gonna have the traditional budget which is our line item budget, and we're also gonna be preparing a performance-based budgeting based on activities and core functions of government and all this kind of stuff, and benchmarks, and so we're all rolling up a completely different budget alongside the normal line item budget.

**Joe Marcella:** David, so that I understand -- Joe Marcella, for the record. When you talk about performance-based budget, it's what the citizens are paying for based on taxes, or what government agencies are funding actually performs a service that's being consumed and used so that you can determine, one, if you're doing it economically, and, two, if it's still appropriate and still should be delivered based on use cases and on...

**David Gustafson:** David Gustafson, for the record. And to further add to that, so is it effective, is it needed and are there duplicates. So you may find, for example, we have an email service, and so what it's doing now is -- not to kind of pick on any agencies or anything, but if you're running your own email server, for example, you will have to now identify all those costs that are associated with you as an agency to deliver that service, so then you can then compare to the enterprise, as well as the private sector, whether it's cost effective or not, or even if you should be doing it in the first place. So it will help to align a lot of things that are -- a lot of the outlying IT services that are out there. It's gonna give a completely different view on the government that we don't have today. But as I understand, the whole transformation to a completely performance-based budget is not yet in stone. So we're gonna do two budgets in parallel at this moment.

**Joe Marcella:** For the record, Joe Marcella. And the peer analysis or the benchmarks that are going to be used, know that you're at least within the level of standard private sector, public sector (inaudible), is there any agency providing those kinds of numbers for you?

**David Gustafson:** David Gustafson, for the record. So we are trying to find benchmarks and measures that are industry standards and that we can compare to other states. For myself with the Internal Service Fund, I have customers for every one of our services, and this is really easy

for me to then say email cost me X amount of money, private sector is X amount of money, other states are doing it for X amount of money, we can compare that. For agencies who don't have that level of granularity in their budget, this was gonna be a very interesting process because they'll have to account for all of their money in their budgets and to services that they provide. And so it will look like even if you, for example, say -- an agency says, well, we want to hide the cost for email. Well, they still have to put it somewhere else, so the costs are gonna be transparent across agencies, whereas now the traditional way is a lot of those costs are buried in corners of their budget that are just unknown. So I think it's a really healthy process for government anyway, the performance-based budgeting.

But I do want to say the ERP, the financials, the HR systems that are under our control, if you will, we don't necessarily -- we don't own the data. IT never owns the data, but we do manage the systems for personnel and administration. That includes the Advantage Financial System, working with the Controller's office. It includes the HR module. A lot of times we have built on things to its, you know, (inaudible) what some of the state employees would understand, the timesheet, you know, that kind of stuff, the payroll system. I would say email is one of the those core enterprise software systems that we have about almost 11,000 people on our email environment right now. There's about 7,000 or so that are still out there that are not on our state email system. But that is, you know, they're out there.

Then as far as software is concerned, most of our business has been largely aligned with infrastructure. The wide-area network is managed by us. We manage the state's data center up here in the north. And in the south we actually have an outsource data center to switch communications down in Las Vegas. It's one of the world's more premier data centers in the world actually.

**Bruce Breslow:** Also, one of the big things is you host the database for all the agencies, don't you? Health and Human Services, DMV, Public Safety. The database is in your basket isn't it?

**David Gustafson:** I love this, the basket. You mean on the mainframe side of the house? So on the mainframe -- for the record, David Gustafson. For the mainframe, there is only one state mainframe, and that is in the state data center, which is where a lot of this critical information is housed and stored, if you will. So as Mr. Breslow was pointing out, a lot of his DMV records and such are in the state's data center are on the mainframe system, as well as NOMADS which is the Health and Human Services program. A lot of the information is there. Unemployment records and such, there has been a trend for all agencies to kind of move away from the mainframe which introduces additional risk into the environment and complexity, but there has been a trend for agencies to kind of move away from it. And in some cases by moving the data away from the mainframe, they're actually putting it into their own server closets or their own servers under their desks and in their own data centers so that they're actually taking the data out of the data center and putting it into their own centers. Yeah.

**Joe Marcella:** Joe Marcella, for the record. David, what I would understand or believe is that -- and you were behind establishing this Board with the NRS and resurrecting it, if you will. You're looking for some direction, and you're also looking for some advice as to what the Board sees moving forward. What I'm going to do is ask the Board as to -- based on everything we heard, to pick three or four, maybe five priorities, and I don't want it to get too far and advanced, or unmanageable, that our key strategic initiatives that do it would need to not necessarily resolve all of the problems, but to start to move in the direction that I hear from a strategic perspective to facilitate consolidation, to start to modernize the systems, to start to accommodate citizens, their new, unique way that they would like to use systems and make sure that all of that is delivered in a secure fashion. Is that what you'd like from this Board?

**David Gustafson:** For the record, David Gustafson. That's exactly what I'm looking for. I'm looking for recommendations from the Board. I know we have a very unique environment in the state government. In the private sector we would have probably been out of business a long time ago. That's just the way the government's built, that's the way it's evolved. That is just the way that it is and, you know, in government it takes a tremendous amount of energy to make change, and I'm willing to commit that energy, but I'd like to know that I'm doing the right things for the right reasons, and this Board to me is more of a guidance, if you will, as to make sure to validate my assumptions and my direction of what I think is the right thing, also to make recommendations that this is not only the strategic long term we all have a shared vision, but how we get there to make the recommendations is also very important to me. So I don't want to be just that one guy who's making all these decisions. I think it's really important that this diverse group of individuals as the members of the Board come together, we have private sector, public sector, we have heavily regulated gaming, we have directors, all of these things to me, we have city and local that to me bring a super group together to make these kind of recommendations, and I really look forward to what the Board has to recommend.

**Joe Marcella:** Understanding that that's what you're looking for, and this might be an unfair way to go about that, but I'd like to go down the Board starting with Cory, and talk about what you've heard and what you believe would be one of the priorities that we need to consider, and the last thing would be is -- which will be the next Agenda item is how are we going to help get that accomplished.

**Cory Casazza:** Cory Casazza, for the record. Just one priority or do I get two or three?

**Joe Marcella:** Cory, you can ten if you like.

**Cory Casazza:** I'd just like three. I think from what I've heard, the highest priorities that I would rank them would be infrastructure, centralization or consolidation, and, you know, more on the hardware, the network, the servers, but also to include the enterprise applications. I think the applications like permitting payroll and financials that cross multiple agencies need to be consolidated in one place to take advantage of some of the efficiencies. I would also rate

governance very high because I think as you move to more of a centralized model, you need to have a strong governance model in place, otherwise if you don't have a strong governance model in place, you start to decentralize and fragment in my opinion. So I think along with that centralization you need to have governance. And then the third one that I would recommend is on the security side.

**Joe Marcella:** Cory, that was five. Cory, that was five.

**Carrie Parker:** Carrie Parker. I would agree with those priorities. It sounds to me that security is pretty high. You know, I'm not privy to the top secret discussions, but I have an imagination and I do read the papers and watch the news, so I would consider that to be a high priority. Also consolidation seems like it should be up towards the top.

**Joe Marcella:** Thank you.

**Kevin Farrell:** Kevin Farrell. Couple of thoughts, Bruce mentioned something I think about the expertise of the developers in the agencies and the knowledge of how the business is run as well as how the applications are put together. From a consolidation standpoint, it would seem to me that the application layer and above would be best suited to remain in the agency, but we hear so much about consolidation and the need for shared service, that anything below that line I would think should be moved into enterprise as quickly and as efficiently as possible. So anything to accomplish that. In the context of modernization, I would use a word to accelerate. Things that can be done such that strategic priorities are around accelerating how IT supports the agencies and supports the business of the state government. And in my personal experience, the business of AAA is always ahead of IT and what IT can deliver to them. So in thinking about modernization, I would say think about it in the context of how can we be more efficient and deliver things more rapidly to keep pace with where the agencies need to go.

**Paul Diflo:** Paul Diflo. I agree with consolidation, and I'd like to expand on that a little bit. And I think if I were the Governor, I'd want to know how much is the state spending on IT regardless of what department that's in. So if there's shadow IT out there or if there's different departments, I'd want to know exactly what we're spending on IT and then break that cost into what's just infrastructure and supporting the state versus what's being spent on really moving the state forward. So I think there's some real work to do on consolidation because I think identifying all the costs and categorizing all the costs is a boatload of work in itself. I think enterprise architecture is important. I think you need an enterprise architect, and I'm stunned that it doesn't have project managers anymore. I think those are critical, and then obviously security is a big deal. We touched on mobility, I guess we'll lump that into modernization, but I think there's real opportunity there with, you know, bringing your own device versus assigning a device. I think there's probably cost savings as well as customer satisfaction associated with that. So I know that's probably more than three, but I think there's a lot of opportunity here. It's great stuff.

**Joe Marcella:** Joe Marcella, for the record. What I'm attempting to do is see if we get recurring themes, and we can get a higher level of priority like consolidation, and then put some working groups behind that to start to identify those things that would work based on their knowledge of the state and what is happening across divisions, and that because of your technical prowess and capabilities as well as your charter, what can be done and can be moved, and then maybe some sort of a level of timeline to figure out how long it would take to do that, some sort of plan as to how it would be done, and then obviously some funding that would be attached to that. But this conversation, and then -- is good to try and establish what those three or four priorities are.

**Bruce Breslow:** Bruce Breslow, for the record. I think this will for the record the first time a department head says this, but, number one, I'd have centralized security, infrastructure and enterprise technology. You won on that one. Number two, modernization and sustainability of our systems that are now 10 to 15 years old. And, number three, something I haven't heard yet, a ready and capable work force. Our IT people are not paid anything close to public sector IT. If you get a degree in computer technology or computer science, you're definitely not setting your sights at working for state government, and they're cannibalizing each other from department to department for a two dollar raise. You have 15 years of knowledge in a system that's going across the street because they will make two dollars an hour more in taxation, and the state IT infrastructure is falling apart in its workforce and then leaping and jumping into the counties and local governments because of benefits, which the state no longer can compare and, you know, quite frankly, they have collective bargaining, so they're more protected in that workforce. So I think we're really hurting in maintaining a ready and capable work force in IT technology and being competitive in that, and I know nobody's talked about that yet, but I wanted to make a case for it as well.

**Laura Fucci:** Hi, Laura Fucci, for the record. I believe that our first responsibility to our citizens is to ensure the information entrusted to us by them is safe and secure, so security would be at the top of my list. I think consolidation would be the next, infrastructure, consolidation in particular. I view that as an area that requires expertise, and I think the administration department with the IT folks (inaudible) is able to provide specialty areas to focus on infrastructure. And then the third area I would probably raise to my list of three would be governance, because I really think it takes a strong governance model to pull those areas together. You really need to understand your processes. It's about -- IT is more than technology. It's about processes and governance is what brings that together and helps build a framework for other things. Thank you.

**Senator Dennis:** This is Senator Dennis. I'm just looking at that list for the first time, but, I mean, the stuff that I'm hearing is stuff that I think are good things. You know, I think somebody mentioned earlier in the discussion about (inaudible) historical, I think it was Bruce. You know, there wasn't a trust there in the system, but, you know, the consolidation stuff I think is stuff that we're seeing and more and more of, and I think it's something, you know, from a



state perspective, I think there's some good things that I can see happening there. You know, I also look at this stuff from the budget and cost control side of this, and I think that consolidation part can tie into that. And then, you know, the data -- the security stuff that we were talking about earlier I think is also very important because, you know, the citizens expect us to protect that information. So I think those would be just kind of a -- just as a quick glance, things that I think are important in the priorities process. Thank you.

**Joe Marcella:** Thank you, Senator. For the record, Joe Marcella. Could we take a run at trying to go ahead and prioritize? I'll actually start with Cory's five, but prioritize what we heard. And I'll take a stab at it. What I heard was security is number one, but the reason and the rationale for security being number one is the only way you can get to a level of cyber security is through consolidation, standardization and the management of the infrastructure. So I would say security as a driver and then consolidation, infrastructure and standards as a secondary item because one would drive the other. Governance, to put some wrapper around this so that it does actually happen, and then to go back and visit what everybody's doing from an application perspective, because I think you said it well, that it's fine to have the applications specific and vertical to the individual departments or divisions. I agree with that. Centralized IT should be in the business of technology. Those folks should be in the business of government. However, there should be some way to assist so that those applications have a platform to run on and we can start to move to the next level. Any other recommendations from a prioritization perspective? Cory?

**Cory Casazza:** Cory Casazza, for the record. Joe, just to clarify, in my mind I always keep some of the enterprise applications separate from the business applications, and in my mind, I think things like HR payroll, purchasing, applications that stretch every agency need to be consolidated or in one area more than they should be in a department, and so I was just kind of wanting some clarification from what you said on that.

**Joe Marcella:** For the record, Joe Marcella. It's the way it's supposed to be done based on the ERP theory, it's supposed to be infrastructure, and that those business applications, whether it's purchasing, HR payroll, financials, all should be riding on the same instance, if you will, and they should be shared across the enterprise, and I would tend to agree that that would be a consolidation and it would be a targeted application. For those other things like the DMV, there is a, you know, in a relationship between that infrastructure, but not necessarily a merge of those applications. They still need to stay vertical and independent. Does that answer your question, Cory?

**Cory Casazza:** Cory Casazza. Yes, perfect.

**Joe Marcella:** Does anybody want to attempt -- anyone else attempt to prioritize?

**Kevin Farrell:** This is Kevin Farrell. I would concur with everything you stated as far as the priorities and the order in which you listed them, and I would just tack onto the bottom of that

list, mobile. Because I think that has to retain some visibility from a strategic perspective in order to catch up to where the rest of the world is.

**Joe Marcella:** For the record, Joe Marcella. I think I want a little clarification for mobile. In my mind there's two kinds. That's a mobile workforce, as well as citizens and delivery of data where it's consumed by the citizenry as well.

**Kevin Farrell:** Kevin Farrell. My thought is more citizen-focused. Just in the manner in which they're going to expect to interact with their government.

**Joe Marcella:** I tend to agree. Paul?

**Paul Diflo:** No, I agree with your prioritization. One comment on the applications, the line of business applications. I just think there needs to be some oversight to make sure there is no redundancy to groups buying a similar or same application.

**Joe Marcella:** Thank you. Okay. Well, then, can I have a motion for the priority, the list of items and the priority?

**Cory Casazza:** Cory Casazza. I'd like to move that we rank the priorities as security as the number one, consolidation, infrastructure and standards as number two, governance as number three, and mobility as number four.

**Joe Marcella:** Do I have a second?

**Bruce Breslow:** I'll second it, but I think you need to describe mobility, because if somebody's reading this, they'll have no idea what it means.

**Cory Casazza:** Cory Casazza. For mobility I think the citizen access and being able to provide them more modern ways of accessing our systems.

**Bruce Breslow:** Second.

**Joe Marcella:** Then we could call the mobilization modernization as well?

**Cory Casazza:** Yes.

**Joe Marcella:** Second?

**Unidentified Male Voice:** I second.

**Joe Marcella:** All in favor?

**Group:** Aye.

**Joe Marcella:** Opposed? Las Vegas?

**Group:** Aye.

**Joe Marcella:** Thank you.

Going back to Agenda item number, 8... let me move back to Agenda Item 7 again. Is there an appetite to add the word either workforce skills, not necessarily just developers, because you're talking about centralizing IT and moving some of that resource into a centralized location. So where I would put it, if I was to modify this motion, it would be under consolidation, infrastructure standards, and then I would add the workforce.

**Paul Diflo:** Yeah. This is Paul Diflo. I think it needs to be considered, but there's probably some work that needs to be done ahead of time, maybe in the form of service level agreements and things like that. Maybe it's a phase two type of thing, but I think it's worth considering, so I would move to include it.

**Joe Marcella:** Can I have a second?

**Cory Casazza:** Cory Casazza, second.

**Joe Marcella:** All in favor.

**Group:** Aye.

## **\* 8. SUBCOMMITTEES**

### **-Types & Roles of potential Subcommittees for recommendation**

**Joe Marcella:** Moving on to Item 8, subcommittees. I used the term subcommittees in an attempt to try and figure out how we're going to investigate these one, two, three, four, five priorities, and then report back to the Board as to what the opportunities are, what the possibilities can be, what their observations are as to the current state of technology, and/or the current state of any one of these priorities, and then the opportunity to move forward. That would mean that some subcommittees to study that items would need to be formed. Any discussion? David has a smile, so I...

**David Gustafson:** Mr. Chairman, for the record, David Gustafson. I was actually still thinking about the last list, and I would -- since you asked me, I am not a member of the Board, but I

think some of the programmers, you know, leaving some of the programmers in the business unit to me is not a direction I would probably take. To me that's like having a company and having programmers in the marketing department and the sales force, and, you know, they all are in IT, they're just aligned to those units, and that is a very distinct difference. I would further add that just this past week I was meeting with the guys from Utah, and they consolidated five years ago all IT. They unclassified all their employees which means they're at-will employees. They gave raises to people and they have reduced their workforce by 20 percent, and now they're one of the premier IT shops among all the states by doing so.

**Bruce Breslow:** Paid for by the Olympic games which is where the money came from.

**David Gustafson:** And they've reduced their workforce. They went unclassified which means they have the ability to give raises, if you will, or to pay more in certain cases, and what they have now is a more specialized, more available, more agile and more productive workforce than other states. In fact, they are looked upon as one of the best actually in the country. So they have a pretty good model I think. It sort of goes back to what Senator Dennis was saying, how do you control the costs. Well, they reduced their workforce by 20 percent because they consolidated all people. You can still have IT people reporting to one structure, which is what most private sector businesses do, but they're distinctly aligned with business units that are not IT. In fact, the role of IT is to support the business, but typically you don't have programmers in every unit. You know, when I look at the executive branch, I kind of see it as a top down. I see departments as divisions in the private sector. So would you have programmers and data centers in the marketing group versus the sales teams versus the finance people? No, you wouldn't. They all report to IT, it's just that they're aligned. You have people who are in those units who are aligned with the business. So anyway, I just wanted to add that out there.

**Joe Marcella:** David, when we talk about consolidation infrastructure standards, are you also talking where applicable that staff will resource consolidation as well? Because I can differentiate between a developer that works in Bruce's department who is uniquely qualified in that business environment who will in fact write code, or at least write reports, and needs to be a developer, classically trained and in that standing. So I need to understand further what you're proposing.

**David Gustafson:** For the record, David Gustafson. And I'm just saying that I do not differentiate IT people. I don't believe, and, you know, I'm certainly open to discuss that, but I don't believe that IT people should be left in business units. I believe the IT people should all be with the IT people. There's economies of scale, there's synergy there, there's brainstorming sessions, there's the ability to get up -- the infrastructure guys can get up and go talk to programmers right away. That's very critical to a successful IT organization. That's what makes some of these IT shops the best in the world. That's where Pixar and Apple and those guys, they can get up, Microsoft. When I was at Microsoft, you could pick up the phone, even if you were just a tester or you're an infrastructure guy and say, hey, call the sequel developer, I

have a problem with this, or I have a question about this. That's really important to have, they're all on the same team.

So to me, the concept of having IT people embedded in business units, one, creates a problem because then you have -- how are you going to ensure that they are building applications and such that are secure, right, that's what the other IT people help you do is peer review and things like that. How do you know that they're getting the proper training, that they're actually doing the things that they're supposed to be doing? Only IT people know these things. Business people don't know this. In fact, I hear this a lot from the other directors where they say, the IT guy shows up with a \$200,000 bill and says, here, I need to have this, and it's just a (inaudible), you know, bill of materials, just all kinds of stuff on it. They don't even know what this is. So now they have the IT guy here with a \$200,000 bill saying I have to have it. Dave, do we need to have it or not? And I say, well, that's what the IT people do. That's why we do this, right? If the programmers show up and say, I need some fandangled contraption and they go to the business unit, the business unit says, well, I guess the programmer guy showed up with it, I guess he has to have this tool or what have you, how would they know that. Only the IT people know this, right? That's what we do for a living.

So the thought of leaving some of those guys out there is to me just probably not a recommendation I would probably feel very comfortable with. I think infrastructure is absolutely the easy stuff to do, but I just think that leaving some of the programmers and those guys out there would be -- it would just be risky.

**Paul Diflo:** Paul Diflo. David, question for you. Do you manage the quality assurance group? So does all the code go through one group?

**David Gustafson:** David Gustafson. No, we do no quality assurance testing. We're required by statute to do all the programming for all the agencies, and we do not very much of it. I say that because even though we do provide 20,000 programming hours to the agencies, what we do in that area is very limited and is very insignificant in the grand scheme of things when you look across the executive branch.

**Paul Diflo:** Question number two then, the developer's skill sets, are they transferable? In other words, can a developer in the DMV have skills to use in another division? We went through something similar where we found we had dedicated developers for manufacturing. Sometimes they were sitting on the bench, so we consolidated them all and now we can use them across departments, but the key was they had transferable skill sets that can be used for any department in the business.

**David Gustafson:** David Gustafson, for the record. So even at, if I may, Mr. Diflo, at IGT you even consolidated the programmers is what you're saying. And that's sort of the beauty of being all in the same team is that you can cross train and that you can offer the ability for people to

move around, and this is really important, so you can not only train people, but you can offer the ability to move around and try different projects. This is what builds a strong team, if you will, and defense in depth by doing that a lot of cross training and those opportunities. What we're finding when I look at the DPS situation is that they have some programmers that are specifically built for the criminal justice system and they are stuck. They have nowhere to go. They can't move up, there's nowhere to move up. They have no peers and such. There's a couple of them in there. And so what happens is they get tired or they want to try something new because programmers are creative people and they like to move around and try new things. They leave. They leave and they take all the knowledge with them and they go somewhere else. They either go to the private sector or they go to another agency. Either way it leaves a deficit back to the business again. So what did we really accomplish by doing that?

I mean, to me, you're better off putting them all together, even if they aren't aligned with those business units, then you can start to build. You can cross train, you can build more collaborative opportunities, and these are skill sets that you may find a guy for example -- Bruce was talking about PowerBuilder and now that's a very unique one, and I told him I hadn't heard that in ten years when he told me that. But you will find people maybe that are on the team and say, you know what, I used to do PowerBuilder ten years ago. I haven't done it in awhile, but if I had to pinch hit, I might be able to do that while this guy goes on vacation or something, or something broke, as if you are just that island amongst yourself again, you have no bench. You have no strength.

**Bruce Breslow:** I'm looking forward to debating this one specific issue with you.

**David Gustafson:** Okay.

**Bruce Breslow:** Bruce Breslow, for the record. For us, we have systems, we have programming, we have networks, we have a rigid testing program. We have a whole division that just is planning, that develops the architecture. We have programmers. We have 26 programmers. We then have a whole group that -- a very small group, but they test it before it's turned live to the public to make sure it works, whether it be the new kiosks or the iPhone applications or adding another program that we're interfacing with the public, allowing them to register their cars or do their smog somewhere else, rigorous testing, and then we have a whole group that's troubleshooting. But the priorities, and setting our own priorities amongst the programmers is so difficult for us that we do it weekly. We have a four-and-a-half year backlog of programming tickets.

When a federal government mandate comes out that requires 4,000 hours of programming or we lose ten percent of our highway fund, which came out a year and a half ago, or somebody wants a new license plate at the legislature, which requires every technician in every office to be able to see it, pull it down, drop down, charge it, money to get the program to where it's supposed to go, or collecting gas tax and separating it to every government school district agency around, or just

putting together -- let's just say we literally, we really do have a four-and-a-half-year backlog of programming. We have divisions, motor carrier, which collects almost all the gas tax that never had any programmers from the past directors assigned to it, so they've never modernized. So we have four new positions we're asking for in programming just for a division that's never been modernized and stuff.

So there is a unique knowledge of this system and this pride of ownership that they built and managed and tested and fixed that it works, and this year we consolidated from 16 million records down to 2 million, and I didn't sleep that night thinking it was gonna be Genesis again, but there wasn't a hitch in it. And now on the mainframe there's, you know, millions fewer records that we're accessing, and new systems to keep our technicians from searching and just automatically opening a new record, we allow them to find the proper record to build off of. So the internal expertise is something that for us, if we're gonna be arguing or debating, or we're not allowed to lobby the legislature, but discussing the consolidation of the IT programmers that are specific to all of these functions that are -- I mean, if we did consolidate, I'd tell you I need every one of your programmers from every agency to get my backlog down to two years, and everybody else would be competing too. So I'd hate (inaudible).

**David Gustafson:** I accept the challenge.

**Bruce Breslow:** That's the tough one for me, and that's probably the tough one for my...

**Paul Diflo:** Paul Diflo. Bruce, question for you. And coming from an IT standpoint as well, why not just hold David accountable and say, you know, this is what I need. That gets you out of the business of IT and you can focus on DMV.

**Bruce Breslow:** IT is DMV. We have two things. We have people at counters and we have a big brain, and the big brain is the heart, soul and beating of the DMV, and that is DMV. So to trust somebody -- every four years you either consolidate or you decentralize. To go back and do this exercise again when there is a system that's working on the programming side, and if one thing goes down, for instance, if he loses a data line or he can't access one of the servers recently for 12 minutes on his end, our wait time goes up an hour and a half. So we are working together on a lot of things, but that's a tough one to give up because of the specific knowledge that goes into every one of those programs that are all tied together in our application. Yes, we need to modernize. Yes, we need to look at technology that other agencies are doing, so we're all building on the same platforms. Yes, we need one email system. That's just dumb that all these agencies have different email systems. There's a lot of things to work toward, but I wouldn't throw programmers in there yet. I would still -- they're such a precious commodity in the state. There's so few of them, and we compete against everybody for the work, for the priorities and for the knowledge. It'd be a tough one for us.

**Joe Marcella:** Joe Marcella, for the record.

**Bruce Breslow:** And they all grew up in the same neighborhood in a certain country, and they don't like to be put apart. Very unique.

**Joe Marcella:** Joe Marcella, for the record. I heard two things. One is that the Board believes that it needs to be considered, and staffing and skills inventory, and particularly developers within a centralized IT has some benefits. On the other end of it, there are two business models that I know of, one of which is if it's federated there is a governance and there's a standard that everyone follows that's audible and repeatable so that's managed so the resources can be distributed. Now, that governance could be that they're distributed and they work for a single agency, or they work for the individual agency and the enforcement is here, but I believe that it's important enough that it needs to be considered, and it needs to be part of the priorities. I'm just thinking that it needs to be put in two places. Under governance it's QA, or quality assurance in the management risk assessment and so forth of the development, and it's also the skills inventory under consolidation. So I need another motion if we intend to change this to go ahead and change it, leave the priorities the same, but add those two items or at least the consideration of the developers.

**David Gustafson:** Mr. Chairman, may I interject before you carry on? I would also like to say when you look at the -- let's just use the Attorney General's office for example, all the attorneys are in one place. They report to the Attorney General, right? They could be decentralized in every agency or whatever, but they lose a lot of critical mass. They lose a lot of synergy when they do that. How many more would we need to hire if we were going to decentralize all of them? And I don't know anything about managing attorneys. I manage IT people. So I am very glad that the structure is in place that it is that the Attorney General can manage the attorneys because that's what she does best. I manage IT people. That's what I do. I will also add, some of the most successful IT organizations that I'm aware of, especially in the state, are all centralized. There is not one of them who is in the top who has a federated decentralized anything. They're all centralized. That's sort of what Mr. Diflo was saying. And I would also like to add one last comment, which is if you wanted to leave the programmers out and establish a governance or what have you, what would be the enforcement? How would -- if I have no authority over other programmers, what if they said, hey, that's a great SDLC, but I'm not interested. My business is telling me to do something else. We don't need to do testing or what have you. So what would be the enforcement if you're gonna have any governance over them?

Anyway, I know the Board -- this is just recommendations. I didn't mean to start a fight. I honestly didn't. I was just pointing out that I thought that was a little bit unique, it would be the Nevada approach to do sort of these things. So I apologize. I'll now be quiet unless I'm asked to speak.

**Joe Marcella:** Joe Marcella, for the record. I need to take a balanced approach, and I will. However, in the interest to what Paul had mentioned, and what Bruce has also talked about, and



I'm gonna use my own organization as an example, there are no phantom IT pieces. There are qualified folks out in the community that are what we call STSAs. They're strategically placed and they're technically competent, but they don't have the keys to the kingdom. I have a very centralized IT organization. When I came there it was absolutely federated. It did have phantom IT organizations everywhere. The cost of IT for the city of Las Vegas is approximately \$18 per citizen per year. It is centralized. I'm in the business of technology. The rest of everyone is in the business of delivering services. So as I said it before, I'll say it again, the cost of IT nationally for counties and cities is about \$30 to \$35 per citizen. So there are economies in centralizing, and there are efficiencies there again. So, I mean, I do understand that. What we do have to decide is that capability and is it feasible within the state.

**Laura Fucci:** Laura Fucci. And I just wanted to excuse myself. I know we're about 45 minutes over and I need to go to another meeting. So thank you very much, it's been a wonderful discussion.

**Joe Marcella:** Before Laura leaves, do we have a quorum?

**Unidentified Male Speaker:** I have about ten minutes.

**Joe Marcella:** Okay. Thank you.

**Laura Fucci:** Are you okay with the quorum?

**Joe Marcella:** We're okay with the quorum.

**Laura Fucci:** Thank you.

**Joe Marcella:** Laura, thank you. Okay.

That moves us to Agenda Item 8 and what I'm asking for is we do have a list of priorities. They need to be vetted out somewhat, a little bit better defined, and then a comparative done between what currently exists and what the possibilities are and where we can go, and that needs a structure of some sort to make that happen, and I suggested subcommittees. I'm not positive that that's the approach we need to take, but some additional conversation has to be had, some additional research and analysis needs to be done. David?

**David Gustafson:** Mr. Chairman, David Gustafson, for the record. I am certainly happy to assist in any way possible. My staff as well. Just tell me where you'd like me to be or what information you're looking for and I'll be happy to compile that for you. We do have a Gartner membership that we lean on a lot. We have National Association of State CIOs. We have a lot of memberships, work closely with the cities and the counties. So if anybody has any information you need me to compile, I'd be happy to do so. I'm available to the Board.

**Joe Marcella:** I think what we need most is where the current state of -- I don't want to call it (inaudible), it's enterprise IT, the priorities that are listed, and the relationship of what the current state is, and then the opportunity that these new priorities present to IT. And somewhere along this process we'll have to decide which ones are the priorities, which ones will be accomplished or should be accomplished and try to tie some budgeting to that. So that would be my recommendation. Can I have a motion? Discussion?

**Kevin Farrell:** Kevin Farrell. The thought process here is to define subcommittees to drill down on these priorities that we're talking about here and put meat around them so that we can provide more detail and specific feedback to David. Yeah, I think that's a good idea.

**Joe Marcella:** So is that a motion?

**Kevin Farrell:** I would move that we establish the subcommittees on the specific items that we feel merit further clarification and discussion.

**Joe Marcella:** Second?

**Bruce Breslow:** Mr. Chairman, I would just say that I would have to assign an IT expert to the subcommittee to do the work. I can't attend any more meetings than I have, and I don't want to shortchange the value of what we could. So if we do the subcommittees, I would ask that we also be able to have a proxy that could attend so that you don't have meetings where nobody shows up because of the scheduling.

**Joe Marcella:** I would agree. All in favor?

**Group:** Aye.

**Joe Marcella:** Okay. I think we'll move on to 10. Is there any further discussion? Closing comments from the Board?

**Carrie Parker:** Carrie Parker. I guess I'm unclear as to what just happened with the subcommittees. Did we create one for each priority, and if so, who's on those subcommittees? What happens next?

**Joe Marcella:** (Inaudible) you had made a recommendation -- for the record, Joe Marcella. You had made a recommendation that you could participate on the subcommittees, okay. Do you also have a recommendation of who the participants would be based on their understanding of your infrastructure and what the state does?

**Bruce Breslow:** Mr. Chairman, I think what David offered was to staff the subcommittee meetings so that we can have information and we can move along. If you break that down, if you had three priorities and you create three subcommittees, and I'd encourage us to do it telephonically because the logistics of gathering here are hard enough, to try to move forward with David's staff being able to gather the information and provide logistics and setting up the calls and things like that, three's gonna be a lot just to start with. So whichever one had the programmers on it, I'll be glad to sit on that one.

**Joe Marcella:** Well, if the top three were security consolidation, infrastructure standards staffing, and then governance was the third. Okay. We'll then have to get back to each individual agency and/or some recommendations from...

**Bruce Breslow:** Can you just send out a request with the -- formalize the three committees and ask who has an interest in each one and see who can respond through email? Is that okay to do it that way, or is that polling, if we're just signing up for something?

**David Gustafson:** Mr. Chairman, while Jeff thinks about that for a moment, I think you have to be careful about not creating a quorum through email, and I think that's something that probably needs to be considered as well when you do that.

**Joe Marcella:** Yeah, there's an open-meeting law issue both as to the polling and then of course the subcommittees themselves would be probably subject to that as well.

**Paul Diflo:** Paul Diflo, for the record. I'll volunteer to be on the security one if that helps. We could maybe just pick them now.

**Joe Marcella:** We can pick them now. David, and would you be consolidation infrastructure standards and...

**Bruce Breslow:** I'll volunteer for that one.

**Joe Marcella:** Okay, Bruce.

**Cory Casazza:** Cory Casazza, I'd like to volunteer for that one also.

**Joe Marcella:** Volunteers for governance?

**David Gustafson:** Mr. Chair, David Gustafson. So who will be chairing or who will be leading the consolidation?

**Bruce Breslow:** Cory.

**David Gustafson:** Don't worry, Cory, I'll do a lot of the work for you.

**Cory Casazza:** As long as that's on the record.

**Joe Marcella:** Anyone want to participate with Paul? Why don't we ask Laura Fucci who has a keen interest in security to also participate with you, Paul? Would you contact Laura and you can tell her she was volunteered.

**Paul Diflo:** I will do that.

**Joe Marcella:** Thank you.

**Cory Casazza:** Cory Casazza. If you need extra participants for the security one, I have some staff that would volunteer also, but only if you need them.

**Joe Marcella:** Thank you. And then governance, any volunteers?

**Cory Casazza:** I'd like to volunteer, but I don't want to chair it, or...

**Carrie Parker:** Carrie Parker. I'll take whatever subcommittee needs me.

**Joe Marcella:** Okay. Then Carrie, thank you, governance is yours.

**Unidentified Male Speaker:** I'm happy to participate on modernization mobility. I personally haven't had much exposure to governance around IT, so I don't think I'd contribute a lot to that.

**Unidentified Female Speaker:** Mr. Chairman, I was just informed that there's another group that needs to be in this room in ten minutes.

**Joe Marcella:** Thank you, we're almost done. Okay. Are we comfortable where we are, application lifecycle, mobility of citizens, I think we're covered.

**Unidentified Male Speaker:** This is (inaudible) in Las Vegas. Not that I need anything else to do, but if I can help on the mobility stuff, I can try to give some input there.

**Joe Marcella:** Senator Dennis, thank you.

## **9. TECHNOLOGY INVESTMENT REQUESTS (TIR) Overview** **-Dave Miller, Strategic Planner, Enterprise IT Services**

**Joe Marcella:** I move to Agenda Item No. 9 in front of 7 and 8. And the reason for that is I thought maybe a lot of what David has to tell us might be framing comments so that we can move forward with some of the prioritization I was considering for this meeting. So, David, could I ask you to present? The other thing that I want to mention is that if anyone has questions during your presentation, are you open to taking those questions?

**David Miller:** Absolutely.

**Joe Marcella:** Thank you.

**David Miller:** Good morning, Mr. Chairman, members of the Board North and South, thank you for having me here. David invited me to come and talk about technology investment requests. For the record, my name is David Miller. I'm an IT planner with EITS, formerly DDP before that. Or that was the early days, then DIS and then (inaudible) and whatever. I've been with the agency a long time. Long time to see this process evolve out of feasibility studies and early forms of evaluation of projects through something we once had called a technology improvement project investment justification to (inaudible), technology investment requests.

I think members of Mr. Willden's staff refer to it as tiers because they've done so many of them. But basically what it is, although it says technology in the title, is a process of building a business case for an IT project investment, okay? We're looking at projects about \$50,000 which basically we catch all IT projects for review, and it's a process that has many components to it. It applies both during what we're now preparing as far as our biennial budgets to things that happen in the interim, and oddly enough within the last I think couple of years we've seen more money flowing into the state in the interim than we have through the biennial budget process because of the Affordable Care Act with Health Insurance Exchange and that sort of thing. And before that, with what David was talking about, a lot of Homeland Security money coming in the state to fund the projects at DPS and other departments.

So it applies across the board, and it applies to projects, and by project, I mean, we're not talking about development of ongoing programs, we're talking about something that is of a duration of a period of time. Sometimes they'll last longer than one biennium, generally the legislature, the people that sit in these chairs like to see things that happen, that you're funding segments at least that happen within the biennium that have some sort of tangible deliverables or something that happen within the biennium. So even in large projects, for instance, a couple of TIRs we have now are for the planning phase for the replacement of large systems like NOMADS at Welfare and like MMIS at Health Care Finance and Policy.

The projects that we often see coming across to us through TIRs, generally speaking, they are business applications and the TIR then would talk to how the investment in technology is going to best support their business problem, or take advantage of opportunities to support their business functionality. We do get some infrastructure TIRs, but basically technology for

technology sake is not something that's encouraged. We have an enterprise IT services division where we build infrastructure to provide services to a number of different business applications within the state. So those kinds of things happen with us, but for the most part, what we see for agencies will be like licensing systems or whatever the business application would be.

Special technology sometimes where agencies have like they're applying GIS or something like that, we have investment requests and those sorts of things. What our role in that sometimes is if our department is not lead agency with like GIS, we work with partnered agencies. I know in GIS that the university that NDOT and Conservation and Natural Resources are all very much involved with GIS, and they kind of have a group of people that work toward standards and that we try to link into what's established in the state in those sorts of areas.

I mentioned study projects, also sometimes telephone systems and that sort of thing. Generally speaking, if we're providing a service, and they're just going to be using our infrastructure as far as our wide-area network called SilverNet, it's more of a service request, and oftentimes those things will not come in as a TIR. We will just channel those over to our service providers.

In the biennium right now we have just had TIRs come in, so at this time in even years starting about April we've had a dozen or so TIRs come in from a variety of agencies, and the fall prior to now I provide workshops in rooms like this over here where I have the class sit up here and I teach and provide information on the process. And I'm not gonna belabor that whole thing. We have a lot of stuff on our website. Everything that we have as a template has at least one guide and so there's a lot of information out there if you have any further information that you need beyond today.

We expect them to provide supporting cost details that they have gone through a process of request for information from vendors to get costs or there's something to provide because this is a budget document and they're making an investment request. And we work with -- now that we're Department of Administration, and it's an advantage to me to some degree because we work with the budget analysts and the budget officers with respect to the budget requests, and if funded, we work with purchasing because they do state contracts and try to have a transition to the contract process.

If you look at the second page, and you'll note that I did this over the weekend so that you'll see that there's a duplicate portion on there. I think during that time I was probably thinking about problems with my sprinkler system rather than what I was copying in here. Basically, our authority is in NRS 242, also in the Administrative Code and in SAM. If you think about it, most of the guidance agencies is in SAM because that's where we can really -- basically the "Hoyle's Book of Rules" for the game, and we can lay everything out. SAM is the State Administrative Manual. It applies to the administration of things within the executive branch, and this is an executive branch process that we're talking about. It does not apply to the judicial or the legislative branch.

So as I mentioned, projects over \$50,000, if there's gonna be work programs, that kind of thing. What we've done within the last four years is we've really made the process a lot more robust. We have a cost benefit analysis methodology for agencies to use. We have -- built within the cost sheets is a worksheet within the workbook to put in the benefits. And so we capture a five-year total cost of ownership, and we've captured five years of financial benefits, whether there'd be revenue like for taxation, or whether it be cost savings in the forms of either avoidance or actual cost reductions. And, you know, obviously what I talk to agencies about is that their estimates have to be credible and we talk quite a bit about how you do that, because some things, especially when you get into cost avoidances, it's harder to get your hands around something like that than it is around actual cost reductions where you know what you're moving from and you have quotes of what you're moving too.

Large projects over half a million dollars are required to have a cost benefit analysis if there's more than one viable alternative, okay? Sometimes there will only be one viable alternative, and by alternatives I'm talking about you build it, you buy an office shell product, you transfer something in from -- I'm not talking about comparing vendor products, okay? Those large projects also go in front of the IT strategic advisory committee, and that's a committee that was set up under Governor Guinn. And its role is varied, but primarily they will look at and have presented to them all the technology investment requests for the particular season for that biennial cycle. And they will score them based upon the scoring structure that they have and make recommendations for the governor's recommended budget. So that's a hurdle that agencies go through from agency request to the Governor's recommended budget.

I want to put the TIR in some context for you. If you look at the little diagram that has the little circle at the top, basically a TIR is not a stand-alone thing. It's part of a larger process. It's kind of a hand off between strategy and action. It assembles many things together based upon a strategic direction that an agency and the state has, and moves it towards an IT solution it then gets budgeted for. You know, after you've looked at the alternatives and selected what it is, you budget for it, and then it moves off to a project phase. And in the end, once you've moved beyond that the TIR also has components in it that have to do with the evaluation of whether you accomplished what you said you were going to do in the first place. So there's metrics within the TIR, and we try to have agencies actually tie some of the metrics in the TIR off to performance indicators in their budget as far as what they do business-wise, so those are the best indicators. They're already credible to stakeholders like the legislatures and the Governor because they've been established within the budget.

**Laura Fucci:** Excuse me, David, can I ask...

**David Miller:** Yes, Laura.

**Laura Fucci:** Can I ask you a quick question? This is Laura Fucci. When you talk about projects that are over \$500,000, when you talk about that other matter, are you including labor costs -- internal labor costs as well, or is that just hard capital dollars for the product and professional services?

**David Miller:** For the record, Dave Miller again. Yes, it includes all costs. In fact, what we have in the TIR, oftentimes because they're projects, we don't see staffing in the TIR, but when they're is, and I'm talking about not contract staff, I'm talking about state staff, when there is -- that's also gonna be in a TIR. We have that built into the whole cost. So it'd be contract labor, vendor deliverables, vendor services, services from Department of Information and Technology, miscellaneous costs like travel, if they have to send stuff with postage or whatever, all that would be captured. So all those are bundled into what the cost it. Now, we tie it pretty strongly to our executive budget system. So what happens there is that the -- our rate restructure and fee schedules that are inside what we call NEBS, the Nevada Executive Budget System, are built into the costs format that we have for them, so that when they put in units of -- for instance, units of some sort of utilization measure for what they need from us, it'll automatically draw against the exact costs that are in the executive budget system. It's as close as we can get without having it actually in the executive budget system. I had a TIR for that once. It didn't get funded. But, yes, we capture all costs. We capture now -- we used to do only two years because the legislature was interested in biennial costs, but we have a five year TCO, total cost of ownership, now for the project so that we can see, because after you get out about four years, they were starting to need to replace some of the equipment. We want to see what the cost is going to be.

On some projects that are longer projects, you will see that there are a spike up in some of the costs later on, that you're committing the state potentially to making investments later on, and those things need to be known. So there's actually what agencies get out of the cost structure that we have is they put the dollar amounts in for the costs, the dollar amounts in for the benefits, and they actually get a profile that's mapped out for them showing cost benefit year by year over those five years. You get ROI calculations back in the form of like, you know, how many years to pay back, what's the rate of payback and the ROI figures, so they will have that. Did I answer your question?

**Laura Fucci:** Yes, thank you.

**David Miller:** Thank you.

**Joe Marcella:** For the record, Joe Marcella. David, what I'm hearing is that there's -- and I guess I'm not hearing it, it's more of an assumption, and in this process there's a consideration as to the nexus or the level of technology that maybe another division has, and that part of this overall formula essentially is a capital improvement project with software and hardware. As it moves forward, do the agencies leverage other departments or divisions' systems and capabilities so that there's consistency across the board and some economy of scale?



**David Miller:** This is Dave Miller again. Yes, we do that as much as we can. Obviously at this point in time, as far as infrastructure build out, we're looking strongly towards moving them into our services, because that's our job. That's what we provide. If they have their own infrastructure and it's, let's say, for instance (inaudible) or something like that, something that is critical infrastructure and that would take some time to migrate or something, we look at how we leverage what we have. So yes.

**David Gustafson:** Mr. Chairman, David Gustafson for the record. I'd like to add to that if I may. We are not very good at that, which is the reason why we have three enterprise portal applications in the state here. We have two identical Oracle technology stack portals as well as an IBM portal. So while in concept we try to catch these things, sometimes when the RFPs are built as such that the solution is determined by the vendors with the lowest cost or what have you, then they get beyond our scope, if you will, at that point in time. So while I agree with what Dave is saying, we're not very good at it, and I just want the Board to know that we're not very good at that.

**Joe Marcella:** For the record, Joe Marcella. It appears that financial -- or justification of applications and systems normally need to be funded, you know, I'm stating the obvious. For those things to move forward, does this in of itself start to create the strategic plan that the government overall or the state overall will use for technology delivery? What I'm trying to say is that the dollars could be used as a lever to start to move to more consistency across the board.

**David Miller:** Again, David Miller. That is a great question, and I'll tell you, part of the answer to that is on the page, what we're talking about, the life cycle. Some parts of the life cycle we're very strong at. Some parts we're in our absolute infancy, and there's some key things that we're really missing that people that have a quality process have that we don't have. Let me talk about each of those.

Where we're strong, we've developed a really strong relationship in hand off from the technology investment request to an RFP in a contract. We've got that pretty well handled as much as we can once the funding and the project's been approved. In fact, the requirements matrix that's in the TIR for the business requirements, technology requirements, security and all that is basically -- slides right into what they have as far as their RFP template in -- for the state purchasing. Right now I think half of me belongs to Mike Willden's group because they have all these big projects that have RFPs, so oftentimes we'll hand hold things into the RFP. In the past we've seen situations before we really kinda tried to plug this hole where an administrator would develop a TIR, they'd get the funding, then they'd hand it off to somebody else and say, develop the requirements for the RFP. Well, the first group gets totally disenfranchised and the second group now runs with the TIR and then they find out later that we have to restart -- we have a total restart because we've dropped the ball somewhere. So we're trying to avoid that. We're pretty strong in that.

We have a new performance-based budgeting process of studying some guidance at the top. We're trying to tie the TIR to that. We're trying to tie the TIR to more strategy, okay? We're weak there right now as David says. So you're trying to do it from the bottom up, when a lot of this stuff has to happen from the top down, okay? That's part of the problem there. Joe, you have a question?

**Joe Marcella:** Yeah. For the record, Joe Marcella. What seems to be missing in what you said so far is that -- and I don't know if it's in statute -- in 242, but an enterprise architect discipline or governance, and what I think I'm hearing is that it is in its infancy, but that's what's developing?

**David Miller:** Again, Dave Miller. It's been developing, then undeveloping, then developing and undeveloping. A lot of it happens with funding. At one point the state and the Department of Information Technology had an enterprise architect. That person is now the CISO for the state, Chris Ipsen. The position was basically lost in budget cuts. We do not have an enterprise architect. We had a larger planning division. We have no planning division anymore. There's me. And it's being kind of like in our budget plans we're kind of reconstituting things maybe with a wiser look at some things within the life cycle process.

There's some other things though I want to talk about, things we don't have that would help, okay? You're the group to pitch this to. A lot of states have a real robust portfolio process for managing projects, and it's under the umbrella of some sort of strategic presence of an enterprise architecture and a business plan, okay? If you have those things and you have projects that tie to that in a portfolio, then, you know, then you can evaluate not only current projects with planned projects, but you can make better decisions in the whole. You know, things are looked at in a larger context. And I think we're kind of -- we do not have a really good process for knowing what we have. With our IT being spread out over a variety of different departments, we do not have a real good asset management approach. Those things are missing as part of this life cycle too. And then, again, we do not have an audit function within the executive branch that is an IT audit function like the legislative one where they have people that go out and audit, what did you do, did you get what you said you were going to get and that kind of thing.

So right now there's parts of it that I think are really robust and strong, and they were probably the biggest holes and where we saw the biggest problems of money being wasted, and that was in handing off the TIR to the project through the contracting process. Now we're trying to fill in some of the other holes, and there are many. So that's kind of where we are.

**Joe Marcella:** For the record, Joe Marcella. Question for David, the other David. In NRS 242, are there not provisions that allow you to somewhat flex your muscles to say that this is a direction we should be taking?

**David Gustafson:** For the record, David Gustafson.

**Joe Marcella:** And I'm sorry to interrupt you, but for this Board it would be interesting to know that there is some level of signature authority and statute to support some of the things that we may come up with from a priority perspective.

**David Gustafson:** Sorry for interrupting you, Mr. Chairman. For the record, David Gustafson. That's a difficult answer. The state statute does allow me some affordability to do that. However, we don't use that, almost never I would say. I mean, there have been rare occasions when I have used that, but we certainly don't do that. We try to collaborate as best we can. Sometimes the politics don't afford us the luxury of doing that, even if that is in the best interest of the state. So the answer is yes, we do have the authority. We have a lot of authority that we don't use, but there are other factors that go into a decision other than do you have the power to do that, yes or no.

**Bruce Breslow:** Mr. Chairman, Bruce Breslow, for the record. Just a little perspective for some of the people on this committee. The Davids are fighting a long battle of historic challenges that in the past what was (inaudible) did not have a great reputation, and I'm talking five years, six years, eight years ago, and agencies were dreading having to ever call them because something broke and it would be four days until somebody came to your aid, so all the agencies decided to fix everything themselves, the big ones. Mike Willden's folks and our agency, we have more IT people than they do. Our systems -- our programmers, we have way more than they do. They have way better equipment than we do. So it's led to kind of a fractured situation. This is the first time in the 20 years or so that I've been associated with state government, either through a city or a county or original board, that I can say that the agencies now have complete confidence that the management of (inaudible) I think is what it's called now, are now partners and trying to solve a solution. So this Board is now starting to meet kind of on the first time where we can shape things.

Health and Human Services has the NOMAD custom program, and everything they do they have to work and build it and fix it and upgrade it and twist it. We have at the DMV, it's called the application because years ago it was called Genesis when it first came online. It was such a big boondoggle that they created a new name that means nothing called the Application, because they're afraid to even say the word Genesis. And all of the people that were hired to fix it are now retiring or taking more money to go somewhere else, so the knowledge base that we have to try to do some of the various levels as it evolved, we still have PowerBuilder as the mainframe that all of our technicians use in order to get to other things. So all of us are faced with unique challenges, so we are looking at David's group and the leadership now, especially on the big things with how do we all upgrade together and be in the same type of technology, rather than put patch here and patch here and patch there, because we were forced in the past to push new technology, and the best way to do it was to do it yourself, and now everybody's done it themselves, and we're all over the place. So this is a good time and snapshot in history to take an overall look at how do we build an infrastructure and a system that is similar.

One of things you mentioned before with security I didn't jump in for is we're always being forced to give somebody else an access into our database, whether it be Carfax or the Secretary of State's new portal, or things like that, and every time we're forced to do it, just like they are, it dilutes our security efforts. So a way to try to get it back in a box I hate to say is where we really are now, and he can't really use his clout, because he doesn't have as many people, any soldiers, as the individual departments have, and the politics, as I know Dennis can attest, often get fractured in the best -- when people have best interests of the state at heart, it sometimes doesn't get anywhere. So I just want to give you a little historic perspective of where we find ourselves today that might help shape the discussion going forward.

**Joe Marcella:** For the record, Joe Marcella. In following up with Bruce's comments, I tend to believe that by reading the statutes, that's why I said you have some framework, and I think this Board can not necessarily leverage the framework, and I'm not talking about (inaudible). It's a matter of there's parameter and an opportunity now to go forward with a level of authority that says that we've got the state's best interest at heart and we're moving forward, and you end up being -- your division, because that's what the statute points to, has enough credibility as well as will build to facilitate what makes sense across the enterprise. Do I have that right?

**David Gustafson:** For the record, David Gustafson. That is absolutely correct. I would also want to add one last thing to what Bruce was saying, and that is we're only as strong as our weakest link. So what happens is the bad guys can't get in -- let's say they can't get into our -- to the DMV database. So what they'll do is they'll go to one of the vendors that does have an access, and they'll start probing and they'll start probing, and then they'll find a vulnerability, and then they'll gain access through one of the vendors which is why we really, really, really are really careful about who we give access to sensitive data. So to me, it sort of summarizes the whole thing. Yes, statute affords the division of a tremendous amount of authority. We don't use it very often. It's just not palatable by many to use it that way. The way the money is appropriated and the way that -- I'm gonna go out and just say over the last two decades or more, just the way the money's been allocated and the people have been allocated, it's a really decentralized model. The statute reads very different from what the actual environment of the executive branch is. We have, because of the way the money has been appropriated, have gone very far off track from what the NRS actually says. I'll just -- one last comment, and that is, after the last session we had some changes to NRS 242, and the (inaudible). Okay. So you have this and this and this. I go, well, no, no, that's not how we're actually structured. He says, but the statute says -- the statute says you have to be structured this way, and I said, yeah, but that's not how we're structured. The statute does not reflect what actually has been implemented in the executive branch of government.

**Joe Marcella:** For the record, Joe Marcella. What I understand is happening in the industry, and that's why we can have this conversation, at the highest level there is an understanding of what really needs to be done, and less and less of benefit for those individual vertical

environments. And there is a possibility today to share from a horizontal perspective in some areas, whether it's infrastructure or we're talking about standardization, and still preserve those things that are vertical in each and every agency within the state, and I would imagine that this Board can help.

**David Gustafson:** Thank you, Mr. Chairman, for the support.

**Paul Diflo:** For the record, Paul Diflo. Let me ask you a question on the TIRs again. Is there an entity that exists of the different state departments that's going to approve or deny these requests or prioritize these requests? I don't think you want to do that, do you?

**David Miller:** I'll be glad to address that. Dave Miller again. Let's talk about the robustness of the process, because I know Joe brought up a signature authority aspect, but I think a lot of things happen just by agencies having to do due diligence in the planning process, and then the way it's set up for evaluation, I want to talk about all of that. So if you go to the next page that has a little diagram, it goes from process to TIR section. Basically what happens is agencies first and foremost have to say why they're doing what they're doing. I mean, they're not buying technology for toys, they're buying it to solve some sort of business problem, okay? And it goes down through tying it strategically to what's going on and say -- okay. Well, let me -- I'll specifically answer your question then first, okay? So would you just repeat the question, and then I'll tie it into this?

**Paul Diflo:** Paul Diflo. The question is, is there an entity that exists, governed by -- made up of the, I would call them, lines of business, but I guess different departments in the state that would review these requests, say yes or no, and then help you prioritize them? I'm assuming there's a limited amount of resources. You can't do everything and somebody or some group has to prioritize what should be done.

**David Gustafson:** For the record, David Gustafson. Essentially what happens is this committee gets together. The reason why the committee exists for statute purposes is because the -- I don't know if it says the division or the CIO must approve all projects that have a developmental cost of more than \$50,000. So ultimately that sits on my shoulders to approve all of those projects by statute. What has been done in the past is we have set up this committee, and the committee then reviews these requests, as sort of what Dave was talking about. They go through and then they prioritize those through this committee process. That then becomes part of the Governor -- well, actually, that process that -- well, maybe Dave could probably know more than what I can tell you, but ultimately what happens is this committee that is established, that is not statute, it is set up largely just on who the participating agencies are. I will chair that committee. It is usually a one-time event that is once before during the budget cycle, so we'll be doing one here very soon. And essentially what we'll do is we'll look through and in essence I will be delegating my authority to the committee to make recommendations. By statute, I am the guy required to approve those projects.

**Joe Marcella:** The Chair recognizes David.

**David Miller:** Thank you very much. If you look at the last page of the diagram, I think it kind of puts it in a nutshell what David was saying. Basically if you look down towards the bottom where it says State IT Governance, what we have now for a governance structure is the IT Strategic Planning Committee. It was a committee formed in concept under Governor Guinn along with several other governance committees. Some of them continue to meet quite regularly like the security committee. Some of them like the Enterprise Architecture Committee haven't met for some time, but that committee will then prioritize the TIR, and the committee is basically composed of members of the Governor's cabinet. So they're looking at these IT projects in business terms. They're not a group of technical people. We have our own internal review group that has representatives from all the technical service areas that look at the TIR to evaluate and provide guidance in approving that.

Now, as far as what happens when a TIR is completed with its review, there's a closure memo that goes out from us to the agency, and sometimes there will be instructional information, and there are directions that are maybe potentially conditional closure on certain aspects, especially around security, because that's such a high importance these days. So anyway, that happens. And then what I think, what I was trying to get at earlier on the other diagram, is that there is a process that agencies have to go through from defining the problem all the way to, you know, what's the project plan for it, they get into this thing. And I've had more TIRs that get withdrawn by an agency than would be denied from us, because they kind of like I guess see the error of their ways and they say, well, maybe it's not the time to do this. Maybe we need to get our ducks lined up more on a business sponsorship level. Maybe it's some other kind of an issue that they really see that they need to sit back and think about how they're gonna tie that more into a state architecture. So I think that one of the biggest benefits the TIR is for the state is making those agencies go through that thought process, so that's really basically taken by all of the agencies now that they do TIRs.

Some in the past, we won't mention names of agencies, didn't do TIRs in the past, and now they develop some of the best TIRs. And so they've realized -- in fact, many agencies such as NDOT and some of the others have their own internal governance structure so the TIR will have gone through that before it even comes to us. And that's, you know, pick and choose between agencies. All agencies are a little different on that. Were there any other questions on that?

**Kevin Farrell:** Yes. Kevin Farrell, for the record. In the case of a large-scale initiative, say seven, eight-figure related TIR, it's approved, funding is there, is funding still managed as the project progresses to make sure that things are meeting intermediate gates successfully and funding is released upon certain milestone achievement?

**David Miller:** Thank you, that's a very good question. Again, Dave Miller, for the record. It is being done through project management, and in the past we had a project management office. We no longer have that. So pretty much we help agencies acquire qualified project managers. We have guidance for them on how to go about that. Many of the things that were developed in a project management framework under that earlier project management office are available. We've been working up checklists for agencies, moving not only from the checklists of what they need to do in the budget process or with the TIR, with their contract or whatever, and with managing the projects so that if we don't have a project manager out there, they can at least go through that as well, and I said, we do not have an audit component where we go out and chase that sort of thing down. Where we plug the hole is in transitioning to a (inaudible) contract and a project management structure. Oftentimes I'll be involved with the interviews of bringing in a master services contract project manager, top gun for a big project like you were talking about. Does that answer your question?

**Kevin Farrell:** Some. But it doesn't sound like funding is governed though.

**David Miller:** No. The short answer is no, but the explanation of why is we just do not have the resource anymore for that. Any further questions?

I guess the only other thing I'd like to point out is some of the tools that we have in the process. Now we have a requirements matrix as I mentioned before, and it pretty much matches what is in the RFP so that when you've planned out what you need in the TIR, it can move off to the RFP for vendors. The alternative evaluations process we have is kind of unique. There's a kind of a checklist process where they'll layout build off the shelf to basically a transfer system or whatever, and they compare on a variety of things, from risk to can it come in a timely way, does it look like it will be the right kind of cost, will it meet our business functionality. And after they've gone through a screening, the alternative either passes or fails at that high level before they get into a full-fledged cost benefit analysis.

Now, the cost benefit workbook that we have -- as you know, a cost benefit is different than an ROI. ROI's are figures for showing return on your investment, but the cost benefit analysis we have looks at functional fit, looks at benefits both cost-wise and non-financial benefits. It looks at evaluating risk, and then it lays out everything side-by-side for up to three alternatives on how it scores across all these things. We have kind of a unique way of looking at non-financial benefits. It's kind of like the way we look at risks, you know, and risks they talk about, you know, what's the probability of something happening, how bad it's gonna hurt, what's the impact if it does happen. Well, we -- you know, I always thought about it, you know, if I step outside on the street, you know, what's the chances of me getting hit by a truck, and if I do, how bad is it gonna hurt, you know. And, you know, the thing is, I can control that. I can look both directions. So what we built into our risk evaluation is, you know, what's the probability, what's the impact and how much control do you have over it, okay? And we did the same thing with benefits as, you know, what's the probability of getting this benefit, how big is the benefit gonna

be and how can you measure it, because if you can't measure it, it doesn't have a lot of value. So they evaluate all of their benefits on these sorts of things, and it spells out in their cost benefit workbook.

So the only thing -- we have some things that are very different from industry-type business case. We build in a lot of stuff for requirements to hand off, we're short by ending the life cycles, we have to do that. We build in high-level project plans so we can hand that right off to the project too. And oftentimes out in the private sector you may not see those components as business case. Yes?

**David Gustafson:** Mr. Chairman, if I may add to that. For the record, David Gustafson. What David Miller is describing is this process and of those parts that we actually have influence over, or control of, have been very well flushed out. But once a project is approved, if you will, and is handed back to the agencies, we no longer have visibility of that. So that as I believe the question you were really looking for, right? So if it was over 200 percent in that agency, we would not have that information or that visibility to see that.

**Joe Marcella:** For the record, Joe Marcella. So there is no follow up past that point to whether that cost benefit analysis actually was ever realized.

**David Miller:** Dave Miller again. Correct. As I said, the only thing we have is the little bit of hand off we have to the project level, but follow up, you know, visibility to what happens after that, whether there's big cost overruns or whatever, we do not have visibility into that.

**Joe Marcella:** Someone does though.

**David Miller:** Someone can legislate about it? No. Someone does.

**Bruce Breslow:** Mr. Chairman, Bruce Breslow, for the record. The legislature and their auditing group and the internal auditors and the governors, that other audit group, there's plenty of auditors, but I think the relationship's important, and that is we're starting to see phone calls back and forth and people talking amongst agencies, and probably that's the easiest thing. Here's a project, where are you, how can we help you, where are you on it. We have connections, you can't find this, you know. And we're starting for the first time that I've seen to actually have a running dialogue with David's group, and that's really important for all of us. The audit function, you know, if you have a cost overrun, it's not like you wanted to have a cost overrun, it's just because 20 people didn't show up for work and you have to wait and hire new people, and that company went under and you've got -- but we are now starting finally to see some interaction which is really good for the state.

**Joe Marcella:** For the record, Joe Marcella. I think what I'm hearing is, is that David's organization has a more and more credible, literally end up being the agency that can tie some of



these things together from an infrastructure perspective, from a security point of view, and standards and what can be leveraged, more or less with the absence of an enterprise architect, your division might actually serve that purpose.

**Bruce Breslow:** Mr. Chairman, Bruce Breslow again. It has to. Infrastructure should be the state. The individual identity of the other agencies and the programmers that work that are specialized for that agency, the creativeness, that can't be taken away and put in one giant room because the knowledge is very specific, but as far as infrastructure goes, the state should be on the same page and has to move in that direction.

**Joe Marcella:** Thank you. David, anything else?

**David Miller:** Nothing further. Any questions?

**Joe Marcella:** David?

**David Gustafson:** No, no questions.

## **10. DISCUSSION FROM MEMBERS**

## **11. PUBLIC COMMENTS**

**Joe Marcella:** This is a public meeting. Are there any public comments in Carson City? Las Vegas? Hearing none...

**Unidentified Male Speaker:** (Inaudible).

**Joe Marcella:** Okay. Hearing none, seeing none, I'd like to move for adjournment.

## **\* 12. ADJOURNMENT**

**Kevin Farrell:** I move we adjourn. This is Kevin.

**Cory Casazza:** Cory Casazza, second.

**Joe Marcella:** All in favor?

**Group:** Aye.

**Joe Marcella:** Thank you.

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Notice of this meeting was posted in the following Carson City, Nevada locations:

Blasdel Building, 209 E. Musser St., Carson City, NV 89701  
Legislative Building, 401 N. Carson St., Carson City, NV 89701  
Nevada State Library and Archives, 100 Stewart Street, Carson City, NV 89701

Notice of this meeting was emailed for posting to the following Las Vegas, Nevada location:  
Capitol Police, Grant Sawyer Office Building, 555 E. Washington Ave, Las Vegas, NV 89101  
Hadi Sadjadi: [hsadjadi@dps.state.nv.us](mailto:hsadjadi@dps.state.nv.us)

Notice of this meeting was posted on the internet via the [it.nv.gov](http://it.nv.gov) website:  
[http://it.nv.gov/Governance/dtls/ITAB/Information\\_Technology\\_Advisory\\_Board\\_\(ITAB\)/](http://it.nv.gov/Governance/dtls/ITAB/Information_Technology_Advisory_Board_(ITAB)/)

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