

## MEETING MINUTES – NPWR Advisory Committee

Meeting is subject to the provisions of the Nevada Open Meeting Law – NRS 241.020

Name of Organization: Governor's Office of Workforce Innovation for a New Nevada (OWINN) - P-20W Research Data System Advisory Committee

Date and Time of Meeting: January 28, 2020 at 10:00 A.M.

Place of Meeting: Nevada Department of Employment, Rehabilitation and Training  
Director's Conference Room  
300 E. Third Street; Carson City, NV 89701

Conference Line: (888) 363-4735

Participant Code: 9319340

Note: Prior to the commencement and conclusion of a contested case or a quasi-judicial proceeding that may affect the due process rights of an individual the board may refuse to consider public comment. NRS 233B.126.

### A G E N D A

*Note: Items on this agenda may be taken in a different order than listed. Two or more agenda items may be combined for consideration. An item may be removed from this agenda or discussion relating to an item on this agenda may be delayed at any time.*

#### I. CALL TO ORDER & WELCOME

*Glenn Meyer, Chair*

Glenn Meyer: Meeting called to order at 10:03am. If there are any individuals dialed in for the meeting, please mute your telephone so we don't get feedback and do not put the muting on hold because the hold music creates a distraction and other callers can't hear the meeting.

#### II. ROLL CALL - CONFIRMATION OF A QUORUM

*Glenn Meyer, Chair*

*Zachary Heit, Strategic Data Manager, Office of Workforce Innovation*

Zachary Heit called roll and confirmed there was a quorum present.

III. VERIFICATION OF PUBLIC POSTING

*Glenn Meyer, Vice Chair*

*Zachary Heit, Strategic Data Manager, Office of Workforce Innovation*

Zachary Heit confirmed that the notice and agenda for this January 28, 2020 P-20W Research Data System Advisory Committee Meeting were posted according to Nevada's Open Meeting Law pursuant to NRS. 241.020.

IV. PUBLIC COMMENT(S)

(Public Comment will be taken regarding any item appearing on the agenda. No action may be taken on a matter discussed under this item until the matter is included on an agenda as an item on which action may be taken. The Chair of the P-20W Research Data System Advisory Committee will impose a time limit of three minutes. Public Comment #2 will provide an opportunity for public comment on any matter within the Committee's jurisdiction or advisory power.)

*Glenn Meyer, Chair*

The first public comment session was announced by the Chair, Glenn Meyer, and after reading the statement above into the record, the public was invited to speak. NO comments were made. Hearing none, the Chair closed the session and proceeded to the next agenda item.

V. APPROVAL OF MINUTES (Information/Discussion; For Possible Action)

*Glenn Meyer, Chair*

Glenn Meyer asked Committee members if they had an opportunity to review the June 13, 2019 NPWR Advisory Committee Meeting minutes. A motion was made to approve the meeting minutes and the agenda by Mary Harmon. It was seconded by Jose Martinez. All were in favor; none were opposed. The motion was carried.

VI. NPWR STATUS UPDATE (Information/Discussion)

*Will Goldschmidt, Project Manager, DBDriven*

Will Goldschmidt: Good morning everybody. Our agenda today, we're going to look at what we've done so far in FY20. I think the last time we were out here was September. Walk through the O&M activities. Provide some news about the 3.0 upgrade for NPWR. And we have some miscellaneous discussion items talking about FY21 schedule. In five months a new fiscal year starts. We spent about half of the O&M money because we're about half way through the year. We've completed the CTE report and if we have time at the end of today and you guys want to see it we can demo it. We have two versions. Both a public version and a private version. The final push was made this morning. As soon as I get out of this meeting I'll send the update to Dr. Hill. We made updates to the public and private version based on the last discussion. Fix the slicers. It's a real interesting look at CTE across the state. We've made just under 500 patches to the servers to date for the first half of the year. We completed the upgrade to the NPWR 3.0 version. It has a couple minor functional changes but it's mostly an architecture change that allows us to link

assets together that aren't necessarily people. In the previous version, only people could be linked together. Including the match back in September when we were out here and updated all the reports to include a bunch of individual changes, I don't think there were any issues there. Based on the requests when we were out here, we took the DETR table that's in the NPWR database, we pointed a data adapted at it. It's now acting as if it were exposure database. And then this week while we're here, we'll be installing data adapters, and that will conclude the upgrade of NPWR to 3.0 Everything will be back in place and operational. Currently, everything is in place, but we can't pull data from NDE and NSHE until we put those data adapters in place. Nobody is pulling data out of the system anyway.

Jose Martinez: Will, can you give me the Cliff's notes about what the adapters are?

Will Goldschmidt: Yeah, we have these Java applications that connect and communicate with each of the agencies' databases that are used in NPWR. So, that Java application is managed by NSHE. It's installed on your server. We installed this years ago working with Jerry. We used to have access to it directly, we could get into it, and we could have done this update without having to go there. Along the way, that access was removed by security.

Dan Boersma: Yeah, we have access, but we don't have permissions. We can get into it but we don't have local admin rights to actually upgrade it. The upgrade is fairly simple. It's replacing files, changing stuff, but I can't do it with the permissions that I have now.

Will Goldschmidt: So that Java application talks to that database and then it talks back to what we call the data hub. Which is the Oracle database that is sending out the queries, bringing the data back, de-identifying all the individuals, doing all that stuff. Think of it like an ODBC connector. It's our version of an ODBC connector that can connect to Oracle and Sequel Server databases. So, when we upgraded from 2.0 to 3.0, it required an upgrade to that data adapter. In fact, just about every component in the system gets touched a little bit differently.

Alright, so what have we been doing since September. We updated the ACT benchmark, Student Completion and Workforce Part 1, Student Completion and Workforce Part 2 reports. Fixed all their filters to display the most current year that's available out of the data. We updated all the page labels on the Student Completion and Workforce Part 1 report. Removed GBC from the list of four-year institutions on the Student Completion Part 1. We removed CCR from the public website. We removed the remedial and development report from the public website. Pulled and reprocessed all your NPWR reports. So, after the match was completed in September, we pulled all the data, reprocessed all the data through a series of question and answer series about why the numbers were the way they were. Especially, about the historical numbers which I believe you have on the agenda for today. Updated the reports. Then we developed a mockup of the CTE report and now we've gotten that mockup completed and ready to go. And then

we got the CTE file from Dr. Bell. We're having a meeting with Dr. Hill this week. One of the things we're going to do in that meeting is capture the business rules of how that file was created. What we want to do is automatically create that file for NDE rather than having Dr. Hill or Dr. Bell come over and get data from Jittima, come back and massage it through a series of spreadsheets and access databases, to get that linked information that says that this individual is either a completer, concentrator, or a certificate earner. So, when we pull the data and do the match, part of the data processing the CTE data and create essentially the Perkins report that they need for their federal reporting, along with all the other neat things that are in that report. So, we want to automate that process so that somebody doesn't have to manually go do that because for any reason that manual process got interfered with, that report would not be able to be updated and we don't want to do that. And we completed our testing of NPWR 3.0. After we install all these components and we make this upgrade, we have to go and test the system completely to make sure everything is working the way it's supposed to work. It is. Everything is working the way it's supposed to work. It's now just a matter of getting the last two data adapters in and we're done with the upgrade. Questions about any of that?

Jose Martinez: So, Will, for the CTE report are Dr. Bell and Dr. Hill aware that when the data match is scheduled? That the data for their report might not be available for them at that time? Just because usually they ask us (NSHE) to do a data match for their students to determine if they are enrolled at an NSHE institution. And this happens sometime in July when we provide that data to them, so they can do whatever reports they have to do. If the CTE flag is now a part of the SLDS process, that means they won't have the data until October, when we do the data match.

Will Goldschmidt: I think that request of NSHE to say here are the students we have in CTE, can you tell us which ones are enrolled at NSHE. We match when NDE, NSHE, and DETR's data is all available at the same time. We might need a second match, but we can do that.

Jose Martinez: Ok, and I think that's going to be a part of my discussion for item 7 or 8. I think Dr. Bell and Dr. Hill should be aware that the data might not be available and they would need to wait until the end of September when the data match is complete.

Will Goldschmidt: So, the current CTE report doesn't show anyone going through to post-secondary education. It's only currently contains information from NDE. It doesn't currently have a link into post-secondary, although we have built hooks into post-secondary reports to be able to follow those students into post-secondary, but right now we have 2016, 2017, and 2018 data.

Jose Martinez: I'm just concerned that Dr. Hill and Dr. Bell are aware that the data they usually request in July might not be available to them until October.

Will Goldschmidt: Yeah, I wasn't aware they were sending you data and asking for a match. So are they sending you a file with student first name, last name, and date of birth and you're running a match and letting them know which students are enrolled at NSHE?

Jose Martinez: Yes.

Will Goldschmidt: Ok. Well, the good news is that's what NPWR does. But we're not aware of when their report deadline is.

Glenn Meyer: I can reach out to them. I think their reports for Perkins are due in December. So, if they need it for that report and that report only, that time should be ok. But if they're using it for something else, we'll have to find out.

Jose Martinez: Because I don't know what they do when they request the data in July from us. What other reports they fit into.

Glenn Meyer: Yeah. I don't either.

Jose Martinez: But they should be made aware that the most recent data available isn't going to be until September.

Glenn Meyer: Ok. We'll run it by them.

Will Goldschmidt: Yeah. If they need something earlier, it really gets back to when NDE data is available and we can run the report. Once we automate it. That's another reason to want to automate it, is they manually created that file this year and gave that file to us. They didn't have the file until September.

Mary Harmon: And that's because the match is run in September. If we need to we can move the match up, depending on when the NDE data is ready.

Glenn Meyer: And I don't think that'll be an issue, but we'll find out.

Jose Martinez: I think it will be important to find out from Dr. Hill and Dr. Bell when they need the data and for what purpose, if it's for something other than Perkins. Like you said, if it's for Perkins, they won't need it until December. But we should find out. It's the same for Adult Education as well. We run that match for them.

Zachary Heit: It's a similar request in June?

Jose Martinez: Yes, it's a similar request. Well, I'd have to get back to you on the date, but it's a similar process because it's a data match to see if those students attend post-secondary at NSHE.

Glenn Meyer: And we're in the process now at NDE of updating Adult Ed data in Infinite Campus so we're building new data elements and a new tab for Adult Ed. So, there will be more Adult Ed information through NDE, starting 20-21 school year.

Mary Harmon: Just out of curiosity, does that mean if NDE gives their data to you, then we don't need to onboard them onto NPWR. They would just be a part of NDE data?

Glenn Meyer: Possibly.

Will Goldschmidt: Ok. So, this is a recap of the 3.0 updates with our new relationship capabilities. I've mentioned this before, but I'll just highlight it again. We can now have relationships between different people. So, we can create links between students and teachers or parents and their children. Where before, I could only link to the same individual in each record. We also get new visibility into the status of each of the components. It will do a lot more than just link the same person across your three databases.

And then there was our discussion about Non-Grad data from NDE. We left here thinking we were good to add that to the data pull from NDE. And we talked with Jittima and I think they treated it like a one-time data pull because they were having us fill out a data request form.

Glenn Meyer: Is that what they were having you do? I can take care of that. I'll just have Jittima add that to what we normally pull for NPWR. Are you requesting historical years as well?

Will Goldschmidt: I think the most direct impact that would have is on the CTE report. So right now we can only provide CTE information on people who have graduated. If you wanted to track what was happening across the freshman, sophomore, junior years while it was happening, you might be interested in those years. But I can't see going back further than the four years prior to where we are now. But I don't even want to say that as the answer. I would think we'd want to go back to Dr. Hill and ask him if he sees a need to add historical non-graduates. Because to me, all those non-graduates are graduates. We only have three years of non-graduates. I don't know of anything we would use them for.

## VII. DATA VALIDATION PROCESS REVIEW (Information/Discussion)

*Jose Martinez, NSHE*

Jose Martinez: On this item, mostly out of curiosity on my end, I just wanted to know what DETR and NDE are doing to validate and review. We mostly want to make sure that we include some of those processes in our own review to make sure we're catching all of the data errors if there are any. Because, Alex at DETR caught some issues that we should have caught too, but we didn't, so we mostly want to learn what you guys are doing so we can implement that as well and at least share that knowledge to make sure we catch all the

errors on time. And that way we move the data into production faster. So, we just want to know what you guys are doing to review the data.

Mary Harmon: I can send an email to Alex. I don't know what they do, or you could reach out to them and ask what they're doing for validation. I have no idea what R&A does for their validation and what they're comparing it to.

Glenn Meyer: As for NDE, I know we have several validation processes from collection through to reporting. I'm not sure what Jittima does specifically for this dataset, but I'll definitely find out, and like Mary, let you know if we're doing anything special for this dataset.

Jose Martinez: At least we do have Sarah at NSHE who has access to the data, validates, and runs the reports, and tests the data. So it's comparable. I don't know if you have someone on your team that does the same thing.

Glenn Meyer: Yeah, like I said, it happens at different points in the process for us. Most of the data we expose comes from our validated dataset so we have a static validated dataset that we use per each year's reporting. So, we use that dataset, so like I said, the only routines I'm not familiar with is how Jittima validates that the data she pulls from that dataset remains intact and keeps its integrity all the way through the match process and to the actual publishing of the data.

Jose Martinez: Would you guys be ok if I reached out to them?

Glenn Meyer: For sure.

Mary Harmon: I'm writing them an email right now.

#### VIII. DATA MATCH REVIEW (Information/Discussion) *Jose Martinez, NSHE*

Jose Martinez: So, for the data match, I shared my concern last time that there were some issues when we started looking at prior years data match and the new one, and we found some discrepancies. Also, if we add new datasets and partners, we might require multiple match events in the future to accommodate reporting requirements for other agencies. Just like the CTE report, we want to make sure the data is available at the time that it's supposed to be or is needed. I wanted to make sure the data match, we're not losing students that were matched before and also to learn why those records were not matched before, why they are matched now and vice versa. Is there a difference in the logic that goes into the matching process? Like a name change or format change? Is there any other checks and balances to ensure data quality for those matches.

Will Goldschmidt: So, every match is a unique event unto itself in that whatever happened in the previous match we don't currently look at that. This was a design discussion that was brought up during the implementation of NPWR during the design implementation. You may have been involved in some of those discussions with Tuhin about whether or not we were going to have a history of the match so that we could go back in time and look at this. It was well beyond the scope of the contract to have history retained like that across the match. It would have added a lot of money and it would have added time to do that, because we would have had to build out keeping all that history and we don't. As to why sometimes a probabilistic match match and sometimes not, it has to do with the algorithms that are used. There are two key elements of a probabilistic match, frequency and probability. So, the algorithms that are looking at these, the mathematical models are looking at how often something shows up and then based on that, what the probability is that it is the same person. We use the same algorithm for every match, so we're not changing how we're doing the match at all. We see this all the time. We run two matches in Virginia and it happens there. 99% of the people are going to be matched like they were before. But it's a probabilistic match, which means every time the software says these people match, except for when we use the SSNs, they are probably the same people. And there's nothing I can do about changing that. The other thing I would say, and for your purpose you're saying my records are going to change if I don't have this history. Snapshot it, set it aside, and use that as your history. If somebody wants that, you snapshot it and this is the report for each corresponding year.

Jose Martinez: At least for us, we have to replicate our results. If we want to create reports that are more high profile or if more eyes are looking at our data and questioning the integrity of the data because the reports are not matching from year to year, so at least from our perspective we have to be able to replicate the data, and that's my concern as far as the data match process. Currently, right now to fix that problem, we're taking a snapshot of each year of our results.

Will Goldschmidt: I don't know of another way to do it personally. Other than implement something that holds it and says once it's a match it is forever a match. A lot of time was spent on this topic. Would history be retained, or would it be redone from scratch every single time on the front side of this contract. It was just too much. Essentially, what you're asking for then is for a data warehouse to be built. A multi-agency, federated data warehouse. And the whole idea behind federated is that agencies retain ownership of their own data. We could freeze it, if you want to do that.

Jose Martinez: If this situation only applies to NSHE and I'm not sure if NDE or DETR have the same interests, but we were only doing it because we have to be able to replicate the data from year to year.

Will Goldschmidt: I think the miss was that you didn't know that. Glenn knows it. Glenn knows that every year the numbers change. But you didn't know it and that just got dropped along the way. The system is really good, but it's not for all purposes. It's not an



operational reporting database. Nobody comes to us and asks us what we did last month, last quarter, or last week because we don't do that. This system doesn't do that. If you need a system where history is retained, this is not that system. We can talk about making it that, but it is not and was not designed to be that. Unfortunately, you just didn't know that.

Jose Martinez: Yeah. I just have to say that people are looking at to implement policies, so we just have to be careful with how we present that data.

Glenn Meyer: Well, we put a lot of notes in the data, explaining those exact things. That these are point in time captures. That the data is dynamic and changes constantly, so, I think we could benefit from doing another match at some other point. Especially, as we start adding additional agencies and data elements. Their timing may be different than ours. So, by doing another match, if not two or three a year, I think we can look at options about how we want to perform those matches within the same year. Do we want to do something similar to Virginia where we would add additional matches, but we wouldn't un-match anybody that was historically match until maybe the end of the year? And then we do a clean slate match over again. From a use perspective, that would make the data at least a little more up to date, a little more current, and could potentially provide some historical points at least for that reporting year. Where we could say, last match this was our reporting, and in the newest match we added these additional matches which had this effect on the data. I don't know, just some thoughts.

Jose Martinez: I wasn't expecting that answer today, but just to start up a discussion on looking at things from a different perspective.

Will Goldschmidt: Again, we have no problem running the match more frequently if you have new data. But rerunning the match with the exact same data is going to serve little to no purpose other than it will just change your numbers three or four times a year. Then people are going to question why your numbers change every quarter. Generally, the data changes when the new data comes out. People are looking at the new year of data. But again, if you have data at a more frequent basis, we can do a match as many times.

Jose Martinez: And just as an example, I think the 18-19 or 19-20 graduating class is available, right?

Glenn Meyer: 18-19.

Jose Martinez: So, that's available. That data is not in the SLDS right now because it wasn't available at that time, but now it is. If we were to run the match now, using that data, it would at least for us, give us more up to date information on those high school students that go into NSHE or higher ed.

Will Goldschmidt: Would you have the Fall now?

Sarah Echo: We would have the Fall, but still, a lot of the things we look at, we look at the first of the year. We're not looking at one term in a lot of cases. We're looking at the first two or three terms when we look at enrollment or continuation, did they continue not just in the fall, but...

Jose Martinez: Yeah, we would only have the one semester, but then by the end of the spring semester we would have the data and we would have those reports updated then. Now, we have to wait until the following data match to do that. Our reports would be out faster.

Sarah Echo: We would have to make all new reports because you can't compare one year looking at three terms worth of enrollment data and then look at one with only one term for the next year, because that newest year is going to look really low. It's going to look misleading as a metric.

Jose Martinez: Right. But we would adjust those reports.

Sarah Echo: I mean, we could redo the reports. I mean we could make all new reports if we're only looking at fall.

Jose Martinez: Because the historical capture rate was done during this time of year.

Will Goldschmidt: Again, if the data is available and you want us to rerun the match, we can rerun the match. IF you want us to rerun the match and refresh all the reports, we can do that. But, if we were doing that four times a year, that's a significant change to the amount of work that we're doing now.

Sarah Echo: Yeah, and three or four times a year, I think that's excessive.

Jose Martinez: Because the data doesn't change that often. But then again, if we have other players with different needs, then we'd have to look at those requirements.

Will Goldschmidt: Absolutely, but right now, what I'm trying to say is that, I totally agree. Running a match is one event. Running a match and updating every report that we've built, is a whole different level of work. It takes months. The match is in September and done, but we didn't have reports that were ready to go live until two months later.

Jose Martinez: Well, we would only be interested in the data match.

Glenn Meyer: I don't see how we would increase much value by publishing those reports more frequently within a year.

Will Goldschmidt: Frankly, I think it would increase the number of questions. People would be more likely to ask why your numbers for this year just changed. You'd have your current year updated within the year.

Jose Martinez: We already took care of that. We're satisfied with the process we decided to do, so we're going to stick with our model because like you said, it's too overwhelming and it'll change the structure and everything you do with it.

Will Goldschmidt: Yeah, it just wasn't designed with that in mind. Unfortunately, you built reports and provided data to people without knowing that. I feel bad about that. We didn't know you built the report. So, I do think though that if you are building reports using this system, we probably need to be aware of what we might be thinking about could impact anybody at this table. If you're using that data for something that's outside the system of NPWR, because we could do things that would have a negative impact on you and have no idea you were using that data in that way.

Jose Martinez: Well, now whenever we use that NPWR data we provide that caveat that this is going to change.

IX. RESEARCH AGENDA AND FUTURE PROJECTS (Information/Discussion; For Possible Action)  
*Zachary Heit, OWINN*

Zachary Heit presented the previously approved research agenda along with proposed projects and asked for feedback or any questions.

Jose Martinez: These reports, the Veterans Report and Financial Aid, who requested those? Are those going back from when...

Zachary Heit: So, this is the former research agenda. The Veterans report was a future consideration because we didn't know what the Division on Veterans Affairs data capabilities were. We originally talked about the quality of their data and it was believed not to be sophisticated.

So, of these, CTE has been completed. Since their data is onboarded now, we can continue to develop other reports using CTE data, but the original report request from their office is complete.

Zachary Heit: Again, this is the research agenda previously approved by the committee. Noticing the titles, there are reports that we think can get done, some are for future consideration, some that need to be removed or can be done outside of NPWR. The last page is a list of reports to considering adding to the research agenda. On this one, I've listed some ideas that have come up in the past. So, we've had discussions with adult education. There's currently some discussion around Adult Education data and connecting

it with EmployNV data. I think that's outside of the scope of NPWR right now, but maybe something to consider down the line?

Mary Harmon: What they're asking there requires individual level data. So, they're reporting on people that receive different WIOA title services. So, we wouldn't be able to do that with the way that it's designed right now with the de-identified data in NPWR. We don't have that ability.

Zachary Heit: Is that what you gathered from our conversation, that they needed individual level data?

Mary Harmon: That's what I thought they were getting at for their WIOA reporting, that they were trying to get at their state model where they have co-enrollment that they have questions about, but they also have to do an interface with us to get the wage data.

Will Goldschmidt: I didn't think she wanted individual level data.

Mary Harmon: Having this conversation with them yesterday, they were mixing up a bunch of stuff together to the point where I said, "We've got two different issues going on here. This is what we're going to provide to you. We going to setup a data sharing agreement."

Will Goldschmidt: But we can do that in NPWR. If we have all the Adult Education data in the NPWR system, we match them to the DETR data, and it's all aggregated and de-identified, so nobody knows who they are. So, we could do that with WIOA.

Zachary Heit: The next item is about CTE automation, which we talked about. We would need to get business rules that would automate the table they currently manually provide to NPWR. That way there would be any disruption to the report if there's any personnel transition and it would be refreshed during the data refresh. And then the possibility for a CTE-Post-Secondary alignment report. This would see if CTE students are enrolling in post-secondary courses and majors that align with the CTE program they concentrated in. We would need to create a crosswalk between CTE course codes and post-secondary CIP codes.

Glenn Meyer: I know there is a state, I believe from New England, and they did do a CIP to SCED CTE alignment mapping matrix. I know it's been done somewhere. We can reach out and see what we can find. Using SCED, we should be able to map those codes to CIP.

Zachary Heit: The last one is about possibly adding DWSS data to NPWR.

Mary Harmon made a motion to add four items to the research agenda: Adult Education, CTE Automation, CTE-Post-Secondary Alignment, and DWSS Onboarding. The motion was seconded by Glenn Meyer. The motion passed unanimously.

X. FUTURE MEETING DATES (Information/Discussion)  
*Zachary Heit, OWINN*

Zachary Heit: I've had some discussion with the members about having the meeting dates set earlier. So, in order to avoid holiday season, I thought I'd start with October as a month. Then three months later in January, we'd avoid holiday season where people potentially are off for vacation. So, if we maintained quarterly meetings it would be January, April, July, and October meetings.

XI. PUBLIC COMMENT (Information/Discussion)  
(Public Comment will be taken regarding any item appearing on the agenda. No action may be taken on a matter discussed under this item until the matter is included on an agenda as an item on which action may be taken. The Chair of the Advisory Committee will impose a time limit of three minutes. Public Comment #2 provides an opportunity for public comment on any matter within the Committee's jurisdiction or advisory power.)  
*Chair*

The second public comment session was announced by the Vice Chair, Glenn Meyer, and after reading the statement above into the record, the public was invited to speak. NO comments were made. Hearing none, the Vice Chair closed the session and proceeded to the next agenda item.

XII. ADJOURNMENT (Information/Discussion)  
*Chair*

Meeting adjourned at 11:53pm.