# **ARC Meeting**

April 22-24, 2025

#### **Attendees**

Steve Duthie, MT
Doug Jones, WA
Savannah Ford, MN
Steven Pennington, NC
Dave Fogerty, UT
Matt Steadman, UT
Amanda Rohrer, MN
Bill McMahon, MN
Joe Jaehnke, WI
Heather Thompson, WI
Jeff Debellis, NC
Wayne Rourke, MI

Sarah McGraw, WA
Mike Curtis, WI
Elizabeth Jerkins, CO
Bharman Gulati, NV
Kyle Davis, VA
Erica Lashley, VA
Gary Sincick, OR
Aniha Davis, SC
Jered Schrock, UT
Oriane Casale, MN

### ARC Update, Meeting Goals - Oriane

#### **Budget**

- \$229,750 through 9/30/25
- \$575,250 through 12/31/26
- \$309,750 through 12/31/26
- Finalizing two contracts, IL and IA, for NEO work. Will have a contract template that works for MN and two other states to leverage for other joint projects.
- LEWIS funding for PY25 is encumbered from previous grant

Monthly meetings have been well attended and productive.

ARC Annual Report is on the WID.org website.

WIG annual economic reports for PY23 are available on the WID.org website. Working on getting reports from every state.

Still hoping to increase use of ULMITA Forum

#### **Meeting Goals**

- Focus on topics that most states could get value from including credentials, NLX, AI, cross state partnerships and API standards for LMI data.
- Develop short-term plans for this fiscal year while funding is more secure, but keep longer term goals in mind
- Identify key issues/topics effecting LMI offices
- Update on the WID 3.0 transition
- Summaries of annual economic reports on website?
- Improve WID.org website including ADA compliance

### CareerOneStop Update – Bill McMahon

Focus on credentials and NLX API: See presentation in ULMITA Forum

#### Questions

- Ghost jobs identification? That can be a topic in itself
- How long are certifications good for? Do you need to keep getting them?
- In-demand analysis hiring new people or turnover related?
- Have there been removal of degree requirements, does it actually have any effect on hiring?
   Data is coming back that it really doesn't.

### License updates – Amanda Rohrer

See presentation in ULMITA Forum for screen shots and links to visualizations.

Summary: Used licensing data to look at licensing trends.

Question: over and under-licensing by states. Do some states require more licenses than others? Yes. For example, only two states license archeologists (NC and MN).

### Skills and credentials work with NLx – OR and CT

#### **Questions:**

- is there a way to compare notes about using NLx data, what has been done with the data, limitations of data. Lots going on, it would be cool to have some way to share this work. NASWA is supposed to spearhead a community of practice but hasn't materialized. For the class the data was available. But she does have the API to connect outside the class.
- what is the data quality? Seems like any kind of data extraction analysis that is not based on a statistical survey, you are not going to have a totally representative sample.
   Lightcast likely has the same problems.

# LEWIS Update - Matt Steadman

Advanced Class in Dec 2024 went well, 24 participants, 6 people from Maryland. Jared from IL was great co-teacher. Documentation seems to be reducing need for training.

BLS wants to use LEWIS for data review for regional offices. Had a training session for Regional Office staff.

Annual OEWS update, not many changes needed but still working on geography changes.

New England states still want to produce township level estimates even though BLS is no longer sampling at that level. LEWIS algorithm is built from QCEW data so theoretically possible but needed additional data from BLS to do that consistently. States will need to provide QCEW extract.

• CT has officially abandoned their counties, and switched to planning regions, necessitates changing maps in LEWIS with newer maps. LEWIS was designed with SOC and NAICS code changes in mind but not geography changes. CT should be working shortly.

BLS wants states to be able to pull data directly from a centralized repository into LEWIS. The problem is how to identify who should have access to that data. Beginning to build out some better control systems for states. Working on design now.

Mike Sylvester retired. Matt is now manager of the team. Jered Schnock is being trained on LEWIS but Matt will still be primary developer.

#### Questions:

- Are monthly meetings happening? No but have been able to contact BLS whenever needed.
   Kirk Mueller stepped in to oversee PC so figuring out priorities now.
- Partial wage imputation. Won't impact LEWIS directly.

### Credential Engine Overview – Rachel Vilsack, chief operating officer

See presentation in ULMITA Forum

#### **Questions:**

- Does ETPL data go into the registry and then back to our website? No, just ingest into the
  registry through an API. Focus was on publishing information. Now we want to see how our
  partners can leverage their own data linked to other data that they have.
- What other research do you do on credentials? Don't have a research team.
- Crosswalk of non-degree credentials to occupations? In a sense the crosswalk is there but as ONET has made occupations available as CTEL there is a growing interest for publishing state specific information on
- Digital wallets, who is driving that? Education space, competency-based education especially. Skills that are needed by employer. Trust registries we don't validate.

# NLX updates – Paul Daniels and Marissa Hashizume

See presentation in ULMITA Forum

#### Questions:

- How far back does clean data go? June 2021 structured data. All data goes back to 2010.
- If you're adding FEIN, does that mean you'll have NAICS codes? Yes, that is the goal. Places restrictions on how to share that info because NAICS is private data.
- How are remote openings coded to capital cities? Can you pull that out and code differently? Yes, working on that. Ghost or shadow jobs, looking at work-site location.
- Is CA under-represented? Yes, that is an issue with job feed itself. In user guide. There were issues early on.

## Al Use Cases (Open Participation)

What are states using AI for?

Enhancing performance reviews, writing more concisely

WA - Analyzing interview data. UI division wants to convert call data into text and analyze for customer service

SC is now allowed to use approved AI systems but at this time none have been approved.

COS MN purchased Julius licenses. Can switch to several different platforms. Cranks out python code, helpful to teach staff. Can do NAICS coding. Can use ONET descriptions to code. SQL queries. Grade level analysis for written content. Deduplication. Becoming part of daily fabric of the work we do.

WI Gemini is supposed to be good. Michigan uses it for coding.

Have been seeing use of AI on resumes and letters, and even during interviews.

OR Paid accounts – both have the ability to make projects, which allows you to accumulate info in one place. For example on accessibility. But it can produce info so fast that you can forget to step back and make sure everything makes sense and is relevant.

Accessibility testing – not using it yet for testing. It can only do so much. Would like to use AI to give a richer more intelligent testing. Can ask if things are tagged appropriately. Could develop alt tags for graphs.

Graph interpretation. Need a human in the loop. Gets harder as AI gets better because it makes fewer mistakes so it is harder to be diligent about reviewing it.

Can't really restrict it to only what you tell it to use. Can use it to help understand how to use APIs.

NC Impact of AI on labor market. See who is using AI, type of conversations it is having.

Al-2027.com Predicting that by next year it will know to write code to answer questions without even being prompted. Gary says it can already do some of that.

Perplexity good substitute for google search. Cites all its sources. Can verify info. Don't use Gemini or Claude for factual information.

## **WID Implementation Progress**

Summary: Overall states are on track for WID 3.0, although not all applications will be pointing to new database by the deadline. ARC states are on track. States that use MT LMI Informer and GeoSol (test version will be available in May) are on track with help from those teams, 30+ states in total. Over 100 people attended the WID 3.0 training in January.

## Other Projects of Note

Tableau server issues in WI. Trying to get Highcharts. What products are states using?

- OR uses Highcharts for a long time. It is good. Javascript framework. Very flexible. OR tries
  to stick with Highcharts rather than multiple data viz software. OR hosts a Highcharts export
  server.
- NC converted one dashboard from Tableau to Highcharts. Working on more. More flexible.
   Will keep Tableau also for now. Experimenting with PowerBI because it is cheaper and looks a lot like Tableau.
  - o NC Today Tableau version
  - o Workbook: NC Today Highcharts version

Is there a general turning away from Tableau?

- NC is moving away from Tableau.
- OR does not use Tableau.
- Highcharts has an accessibility version. Will play an audio version of a graph. OR is thinking
  accessibility all the time. CO and OR have formal accessibility projects. Highcharts more
  accessible, have a plug in accessibility module. The main use case is for the website, not
  internal or analysis.
- R Shiny. Complicated but with AI it is much easier.

#### Questions:

Is Highcharts easy to use? Tableau is easy to start using but hard to customize. Highcharts, once you know how to use it is easier. Sounds like R Shiny is more complicated. For Highcharts you need to have someone who is familiar with programming. But AI might change that.

Could we buy a national license to Highcharts? Maybe more useful to do a training or demo for all the states. Or build something that pulls from the WID that could be useful for all states.

# Identifying Tech Occupation Domains - Savannah Ford

See presentation on ULMITA Forum

#### Takeaways:

- Ended up with 14 domains (listed in presentation). Categories of tech that made the most sense in identifying a tech skill. Top 3: security, data, business analysis. These are in a tight cluster and overlap with other domains.
- Every domain had similar levels of overlap. Not necessarily self contained skill sets. Or maybe terms are just too vague.
- Typical education requirements by domain small slice of data because only 15-18% reported education. Most typical, BA, high school diploma.
- Wages below 20% of postings, \$70 and 120K per year. Wages are unexpectedly low for tech field.
- Caveats
  - o limited to jobs reported in NLx, descriptions
  - can be very vague, building domain dictionaries is a heavy lift and the words used evolve quickly.

 Opensource taxonomy that we can share could help keep this updated. Happy to share lists of domains.

### O\*NET Updates - Phil Lewis

Outline available on ULMITA Forum.

### ETA Report Out: Don Haughton

Funding – Working to get money out the door, COS, ONET, ARC and PMP. It is all June 30 money and needs to get out as soon as possible.

Employer database – Extending Data Axle contract in 2 week increments. As soon as RFP goes out, DataAxle will be one of the bidders. Then has to go through another review process. It is a priority contract for us. Will talk with DataAxle about the next update. Are there any changes to the contract requirements or language that we should be aware of? No, keeping statement of work close to what it was, worked with Amanda on it. Only looked at table structure to make sure it is in line with WID 3.0.

O\*NET – Pam Frugoli retired at the end of March. O\*NET will be moving to Emily Thomas' division – Office of Development, Policy and Research.

DOL – deferred resignation program, roughly 30% of people in ETA took that option. Within Don's office, also about 30%. Same in regions.

SOC policy council work is still ongoing and appears to still be on schedule. Looking at healthcare, identify STEM occs,

WIOA TEGL is in clearance here. WIG TEGL should be out soon after that. Didn't get cut, still at \$32 million.

Hold off on planning a meeting in the next 6 months. Don't know if the ARC as a whole is going to get the entire \$885K.

Question: will accessibility hit LMI offices at some point? Don will look into it.

### State Collaboration Approaches – Group Discussion

New, Emerging, Obsolete Occupations – Jeff

Make providing research on OES and NAICS revisions response a priority, how do we address this in a timely way? How can we get it built into the ARC process? This project was good for skill development and thinking about how to replicate this process.

- We could identify research and researchers in LMI offices.
- o Design dashboards together.
- o Identify other research or projects that we all want to benefit from together.
- Survey states, what are key products, projects that you would want us to do and would anyone want to work on them?

Brainstorm and research topics of interest:

- Summaries of annual reports
- Training/exploration of visualization software: Survey of what states use and what their priorities are
- Learn more about state priorities around accessibility and data visualization
  - o 508 only applied to federal websites, 2.0 may have gone up to 2.2
  - o ADA Title 2, applies to state and local only websites, 2.1
  - More stringent than that? <u>Fact Sheet: New Rule on the Accessibility of Web Content</u> and <u>Mobile Apps Provided by State and Local Governments | ADA.gov</u>
- NC, skill gaps, between what is being demanded in job postings and what is available in existing job market. Al and innovation, healthcare challenges, housing
- MI child care, transition to ev, workforce to retrain in ev careers, building tools to see if they are at risk based on product line, connect to resources that are available, ways to match skills and experience.
- WA study data quality, Deep dive on occupational data, compare UI wage records job titles to OEWS data, extracting info out of job titles, potential for cross pollination on this topic.
- Green jobs partnership on climate action frameworks in states and others. EPA conveners are
  talking up LMI offices to the CPRG recipients so you all may be getting questions, although it
  seems like it is probably too late to write LMI offices in for funding. But it may be a way to make
  connections before the next round of funding in ??? years. partnership with statewide
  Workforce Boards.
- Data practices and contracts: Cross-state contracts and DSAs can be a huge stumbling block. I
  don't know if there is any way around this.
  - Finalizing NEO contracts with IA and IL so will have template that works for 3 states and maybe more.
  - MN has Data Sharing Agreements that we could share with states that are working on developing these.
  - For MN it always comes down to having reasonable partners in legal, contracts and UI and having someone in LMI bird-dogging the process.

## API Standards Workgroup Report Out

Discussion summary: ARC members are both consumers of and in some cases producers of APIs. BLS API does not meet LMI community needs, so we can't refer people to it. ARC planned to provide feedback to BLS on their not-very-good API but decided that it was not worth it because the fix would be too costly/intensive. So where should we go in terms of offering resources in relation to BLS data?

COS, BEA and Census have good APIs. OR has Open API specifications for the WID but questions remain on how to host a public API and whether or not it is realistic in terms of available resources and/or worth it.

## Cross state collaboration Report Out

State survey – what expertise and level of expertise exist across states in different technology and what projects/research are states working on? What tools are you using and do you like them? What research are you currently doing, hoping to do, have you done? Is there opportunity to

collaborate? How often do you publish? WI will develop and run survey. Start with ARC states, once we have the results from that we can tweak it before we sent it out to everyone. Short survey. Develop a Tableau tool to display the results. Will work on income contract.

What research could states collaborate on?

- What states have blogs?
- Teens summer forecast MI
- Tariffs: Jointly develop a tool to track employment impact of tariffs once they settle into a pattern
- What is happening on green jobs? NC, MN:
- Census poverty data is available to all states.
- How can we use AI to identify accessibility issues
- Tourism from Canada and how it is impacting northern tier states could make a good collaboration
  - Use Placer data subscription shows where cellphone data is coming from, geolocation data
  - o lowa was using a different data subscription software
  - Flight information
  - o Laurie Troutman, Boarder Policy Research Institute

### **Action Items**

- 1. Work on a contract with WI for survey MN and WI
- 2. Schedule monthly meetings MN
- 3. Reach out to Highcharts WA
- 4. Accessibility Check if CO is willing to share with ARC
- 5. Think about how to do a training on how to use AI to do specific accessibility work OR
- 6. WID 3.0 update documentation MN
- 7. Use monthly meetings as practice session for trainings see states above
- 8. Post monthly meeting times and topics on website MN
- 9. Question about website on the survey (and put survey together) WI
- 10. Putting together and following through on a communication plan MN and all
- 11. Al what do we want to share out? Add to survey. WI
- 12. Communication plan: Heather, Jeff and Wayne will report out at C2ER meeting and Oriane report out at NASWA. Develop talking points MN
- 13. API Bill will write some stuff up on APIs and specifically COS API. Communicate back to Jay that we don't have a solution, too costly Oriane.

#### Next monthly meetings:

- May: ARC one year goals. Doodle pool
- July: Demo of highcharts and power BI. Sara WA and Joe WI Open to interested states but NOT a formal training
- August: ARC website. Doodle pool
  - Power BI, Wayne MI, Sara WA Open to interested states but NOT a formal training

- September: Accessibility, Elizabeth CO and Gary OR Open to interested states but NOT a formal training
- October or next in-person meeting: 3 year ARC goals
- Future discussions: Blog articles republished on ARC website curated. Research topics, collaborations in states, more finished products.

# Next In-person Meeting

- Week after Thanksgiving or first week of December
- NC?