Conflicts with an existing BLS meeting meant that only one person representing a labor department directly was able to attend, so much of the discussion turned out to be around education data issues.

**Review of Current Status**

All projects have completed MOAs (except Oregon’s Employment Department) and most have passed initial data to the Clearinghouse. State-by-state status:

- **Oregon** – Postsecondary enrollment data successfully sent to NSC, awards not yet, but coming. K-12 data have been extracted, but not yet sent. A few incompatibilities were encountered in the race/ethnicity fields and the institution code in K-12, but these were solved by recode.

- **Washington** – All postsecondary data successfully sent to NSC, K-12 coming next week. No problems experienced.

- **Idaho** – Postsecondary data aggregated from institutions, but not yet sent. This will be ready in a few weeks. K-12 data needed some reformatting but will be sent this week.

- **Hawaii** – All data sent last week but needed to rebuild the K-12 files because of a change in platform in the middle of the tracking period.

An issue came up about what to do about multiple records of the same person with different identifiers. States will send additional identifier information appended to each record and the Clearinghouse will sort it out.

There was a discussion about how closely the project’s exchange of data needs to mirror the Common Education Data Standards project (CEDS). Instructions to the states for cohort extraction were to adhere to CEDS in terms of the data element definition. However, it was not always easy to do so. Participants pointed out that it makes sense to select and adhere to a standard for data element submission for both data quality and sustainability reasons. In addition to the data element definitions, they indicated that the technical aspects of CEDS are important as well. A side conversation suggested that meeting with the National Student Clearinghouse on this topic could be worthwhile.

Finally, there was a discussion of a press release, now that the MOAs are signed. Consensus was that a press release was probably premature at this point and would be more effective once the exchange has actually produced some tangible and interpretable results.

**MOA Issues and Lessons Learned**
Each MOA has turned out to be different, crafted for the particular circumstances in each state. In some cases, MOAs have been multi-party, depending on who holds the primary source data in the state. The general conclusion is that this is likely to be the case in any multi-state effort, though folks did seem to believe that beginning with a common template was helpful.

All states had difficulty getting their Attorneys General to really understand what was going on. The data flow diagram didn’t particularly work for them and there were differing opinions about how to address the Clearinghouse in the MOA. One state (HI) was unable to consider WICHE a “state agency” for project purposes and the University served as the agent. Another (Oregon’s Department of Education) completely re-wrote the MOA to cut the verbiage by two thirds, omitting most contextual references to why things are being done the way they are. This suggests preparing two versions of MOAs from the outset—a bare-bones “legal” document with no explanation and a fuller one with descriptive material.

Institutions have been less involved with the project from the outset than state agencies, so sometimes raised difficulties at the last minute. This served as a reminder of how vital it is to involve stakeholder communities at appropriate but early points, although doing so does bear costs.

Timeline and Data Flow

There was considerable discussion of how the timeline might be shortened by cutting out multiple interchanges with the Clearinghouse. Workforce extracts could also be taken at any point in the process after SSNs are available, and states suggested that they could provide just the SSNs almost immediately upon receipt of the merged cohort file, while taking additional time to clean and supply the full set of postsecondary enrollment and awards data the exchange needs. The general consensus of educational data owners was that the extract process would or did take a lot less time than the timeline allowed, once the rules of exchange were established. The exceptions are cases (like ID) where substantial data aggregation from institutions has to occur first.

There was also a lot of discussion of the role and eventual structure of the Exchange Identifier assigned by the Clearinghouse, whether it was needed overall, and what its role should be in the future. It was generally agreed that something like this would always be needed in preference to making all matches from scratch each time using available PII and directory information. But an idea worth developing was that the Exchange ID might be periodically scrapped and a new number reassigned to help preserve security over multiple exchanges. Participants also agreed that states needed to make the strongest match they could before the data are sent to NSC due to limitations in NSC’s capacity to sort out duplicates and perform matches themselves with confidence. Finally, the Exchange ID should not be shared with anyone outside the project.

Data Architecture

The document circulated is a good start in considering various architectures, but this is a completely conceptual “futures” document because nobody wants to make any changes that would affect a set of signed MOAs now in place. All this discussion is strictly to inform any future MOAs in
this consortium or for the purpose of informing other state consortia who want to go down this path.

The discussion of alternative designs needs to be organized under two main headings—a “centralized” design under which data are aggregated from states and are physically present in a central data store and a “federated” design (like WRIS) under which there is only a system of “pointers” to data elements that are held and maintained by participants themselves. Although the project is committed to a version of the “centralized” design represented by the MOA in the short term, states were eager to explore more fully a “federated” design for the long term. One significant advantage of such a design would be that participating entities never lose control over the data for which they are responsible.

Among the “centralized” alternatives, an additional one needs to be developed that is based on the approach of extracting an all-students set of data elements as an alternative to just extracting cohort-based data. This design would enable participating states and the Clearinghouse to generate multiple cohort analyses based on different definitions of cohorts. Also, future designs need to decide the periodicity with which cohorts are updated and new data extracted.

Whatever the architecture eventually used, it is critical to take the up-front time needed to establish standard definitions and formats for all shared data elements. These need to be embedded into the software and systems in all participating states to ensure standardization.

**Governance**

The group kept returning to the original proposed governance arrangements discussed at the Boise meeting that comprised an Executive Council consisting of one representative from each agency in each state and a Steering Committee consisting of one representative from each state. These would be assisted/supported by a policy advisory group and a technical group.

All participants also endorsed the need for a third-party organization to perform coordination functions, let contracts to vendors for storing and maintaining data, matching records, and developing software. This is the role currently played by WICHE, although some participants suggested that housing it at a research university might be an idea worth pursuing.

Most participants believed that financing questions would be largely determined by the governance arrangements and system architecture eventually adopted, so it was premature to go into much detail at this point. They did agree that some kind of fee for service would be required to sustain the exchange but were uncertain about whether this should be on a per-state or a per-record basis.

Governance responsibilities were outlined as follows:

- Executive Committee
  - Data coordination
  - FERPA/IRB/legal issues
  - Development and maintenance of the “rules of exchange”
- Membership issues—who gets to play and what can they do?
- Maintenance of lines of communication among partners, institutions, and the public
- Third Party (WICHE analog)
  - Prioritizing research requests and access to data
  - Housing data and/or operating systems
  - Contracting

These will be developed more fully as we move forward.

**Overall Points**

As before, the discussion reinforced the conclusion that Workforce people have little in particular to gain from this exchange except being "good citizens." Need to find some ways to get them to the table early in any new states or consortia to show them how much they can benefit the state as a whole by benefitting the education sectors.

Progress is slowed by personnel changes inside any group of participating states because of the need to bring new folks into the conversation who don't necessarily enjoy the levels of trust among original participants. Also, progress is slowed by any ambiguities in the surrounding legal environment (e.g. continuing re-regulation of FERPA).

The size of the consortium in terms of states and agencies needs to be carefully considered because it takes time for folks to get used to each other, agency constraints, and to build trust. This project (four states and about twenty agencies) is about the limit of what can be started from scratch and probably about the limit of the number of new states that can be added to an existing consortium at one time.

There needs to be some systematic discussion of whether, when, and how to eventually include records from independent institutions (both postsecondary and K-12) in the exchange. Some participating states do have records from these, but their data holdings on them are less extensive than for publics.

**Possible Products/Ideas for More Extensive State Implementation**

The conversation also suggested that it might be useful to develop an explicit set of state "readiness criteria" that potential new states could use to determine the extent to which they are in a position to move forward. Possible elements might include a) what is the extent of current data holdings, b) who holds them and what is the aggregation challenge, c) what existing data exchange agreements are already in place within the state and who do they cover, d) is there a single supplier (like ERDC) already in place, e) is there any multi-state data sharing experience present, and so on.