

Technical Advisory Committee Meeting

May 15, 2025

Attendance: Jim Stewart, Jenn Gibbs, James Deaton, Bill Mott, Jeremy Cox, Greg Scherer, Rick Gaisford, Lynn Yocom, Joe Breen, Barry Bryson, Kevin Quire, David Long

Open Items Update Meeting (no set agenda) Continuing with AI Discussion, Strategic Planning and other items

Topics: Infrastructure projects, AI advancements, applications and ongoing research, ongoing partnerships, data sharing efforts, network upgrades, cloud security strategies, strategic planning

UDOT update – Lynn Yocom

- Four radios installed I-80, mouth of Parley's. Will tie into UEN core server, additionally looking at the network path and back into traffic operations network
- Licensing changes due to the FCC and legislative changes
 - Jim would like higher ed campuses included in what UDOT does with this
- Five major fiber projects in the works to help with connectivity across rural areas in the state
- Looking at using AI; still getting educated. Exploring the possible use of the National Research Platform's resources
- Ongoing efforts to do cross-borders data sharing with neighboring state's DOTs
- UDOT/UEN partnership five-year plan is in the works
 - Will help with future legislative sessions and stabilizing communications in rural areas among other things

Internet2 update – James Deaton

- Addressing certain key types of AI uses and working in collaboration with multiple institutions and projects for everyone's benefit
 - Leveraging existing intelligence and data sets, machine learning for anomaly detection/network forecasting, and developing data sharing policies
 - Exploring National Research Platform and LLM (language learning model)
 - Retrieval-Augmented Generation – a technique used in AI that enhances LLMs

GPU resource requirements and capabilities – Joe Breen and Jim Stewart

- Need for both batch and real-time processing
- Aim is to establish own infrastructure and not rely on vendor-sponsored resources
- Define documentation structure, work packets, and explore research opportunities and operational needs. Discussion of forming small working group with Carl Newell, include input from Joe Breen and Danial Ebling for this

Hybrid architecture for data centers and cloud infrastructure – David Long

- Concerns about balancing secure on-premises data centers with cloud capabilities. Privacy issues would need to be addressed

ARPA, Backbone, 400 Gig update – Kevin Quire

- In process of completing wavelength upgrades and router replacements across the backbone network; providing reliable capacity for the next 7+ years

AI Leadership K12 conference held at UVU, May 21st – Rick Gaisford

- Will share links to highlights and information when made available