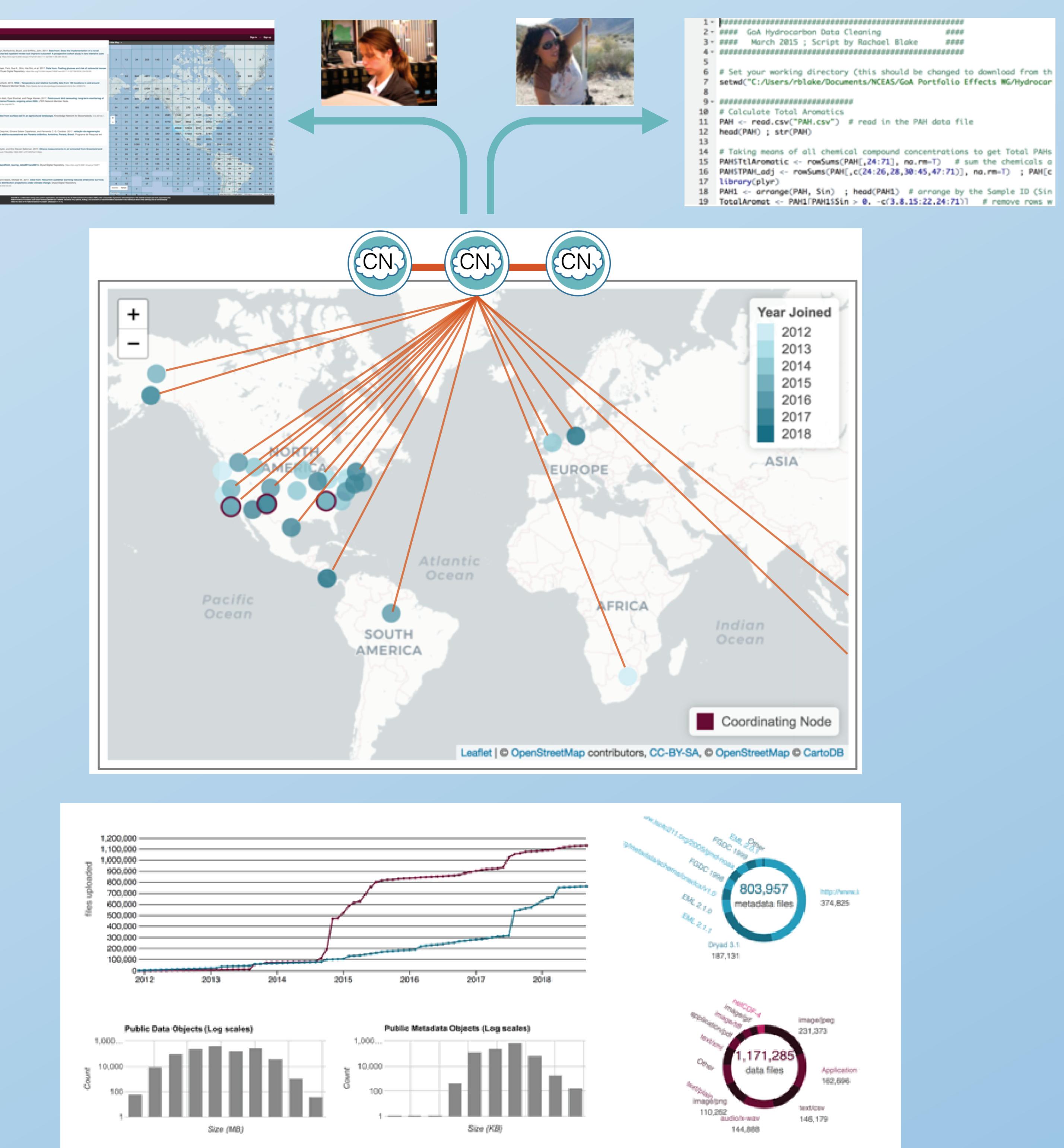


Core Cyberinfrastructure



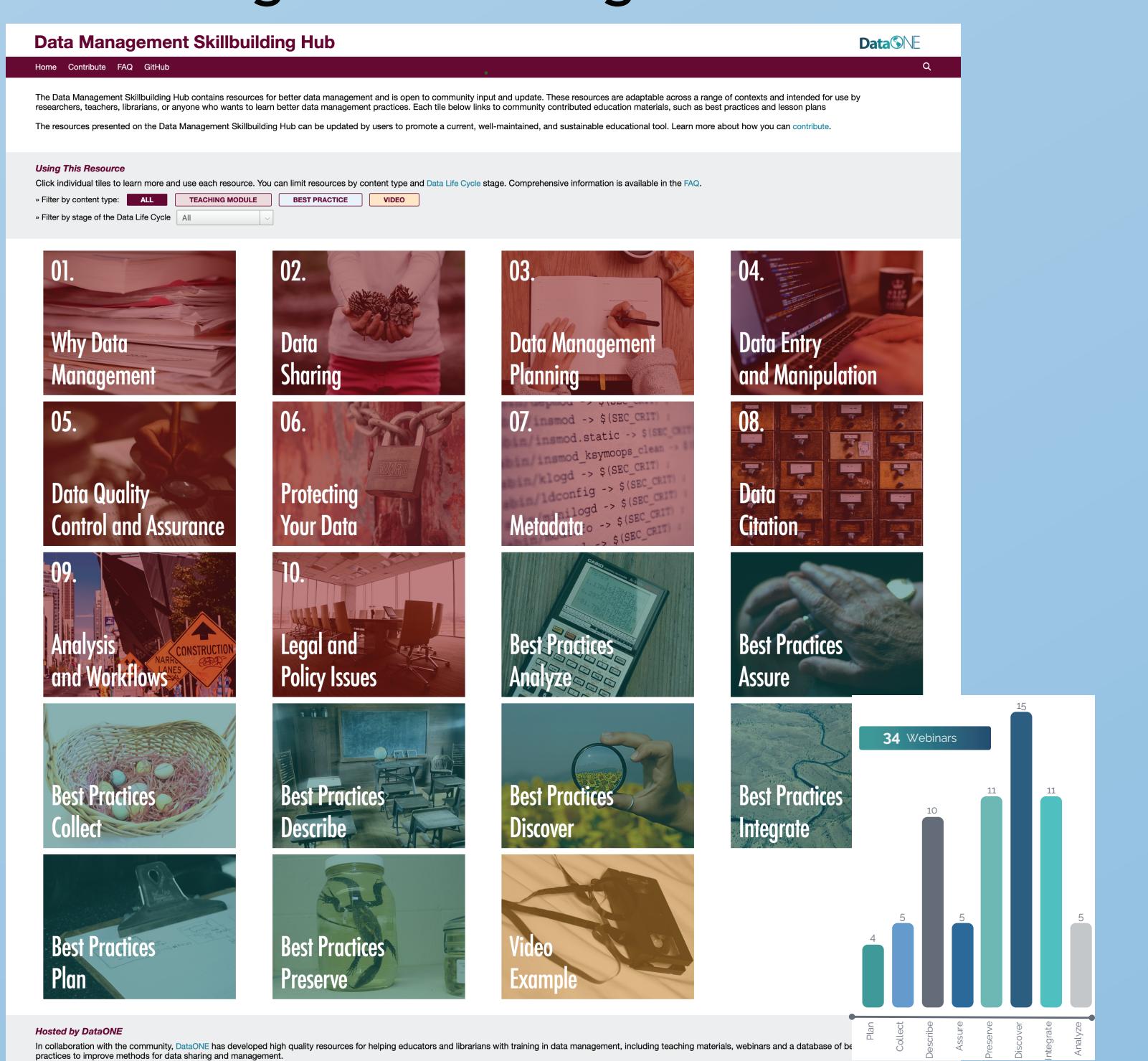
Karl Benedict ¹, Robert J. Sandusky ², Amber E. Budden ³, Matthew B. Jones ⁴

Overview

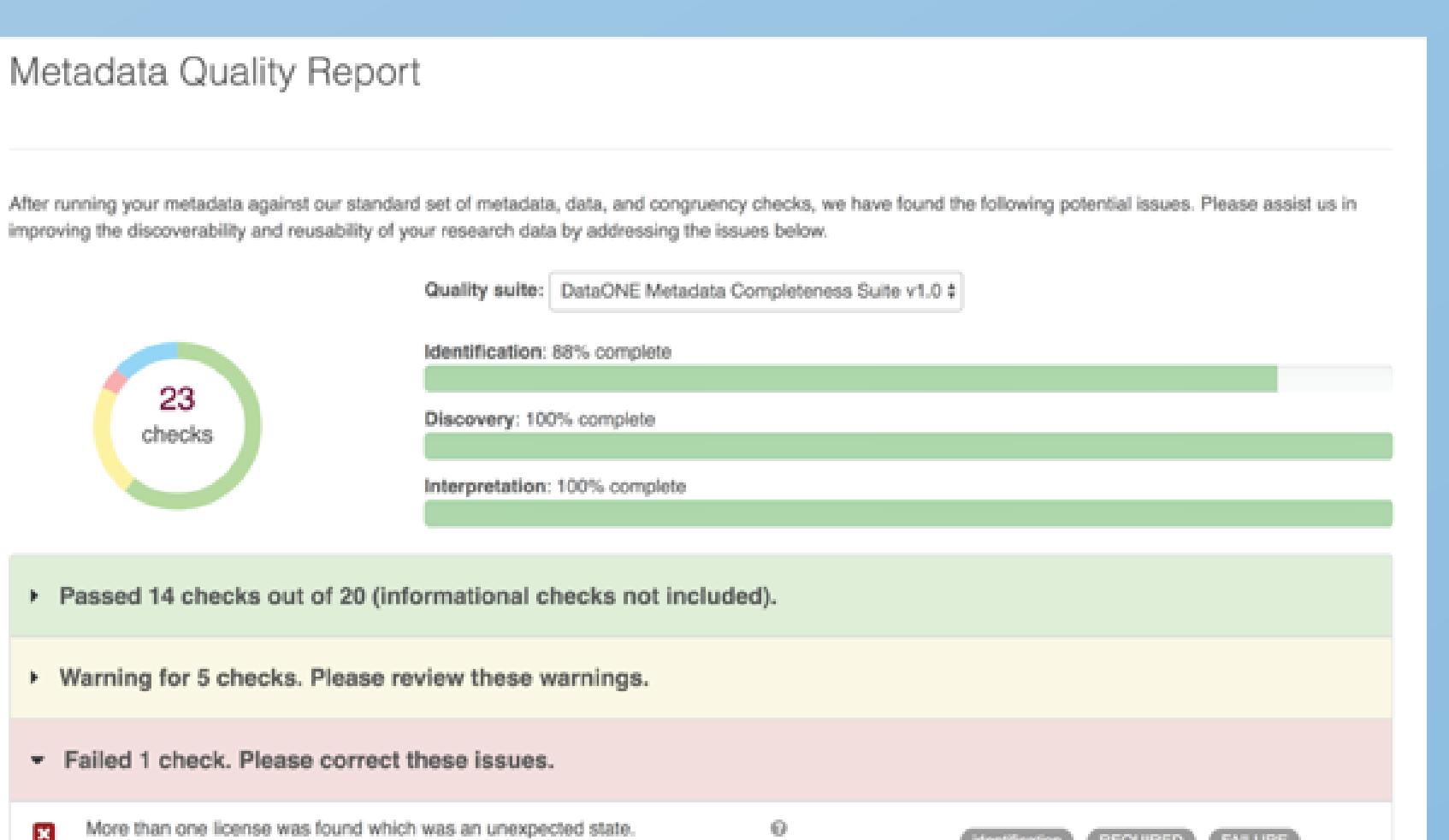
After nine years of support from the National Science Foundation to develop core cyberinfrastructure; user facing web services and interfaces; integrate data products and services from multiple data repositories; and engage with a growing community of repository and end users through education and outreach, the DataONE project is focusing on sustaining these capabilities well beyond this initial funding. In the final year of its current cooperative agreement, DataONE is working on expanding its community-centered approach with increased engagement with DataONE users. In this approach to sustaining the significant infrastructure and community development that has been accomplished to date, the DataONE Users Group (DUG) sits at the center of an expanded model of bi-directional interaction in which the community (facilitated by the DUG and its Steering Committee) contributes to the identification of future developments of the DataONE infrastructure and community.

Key Products & Services

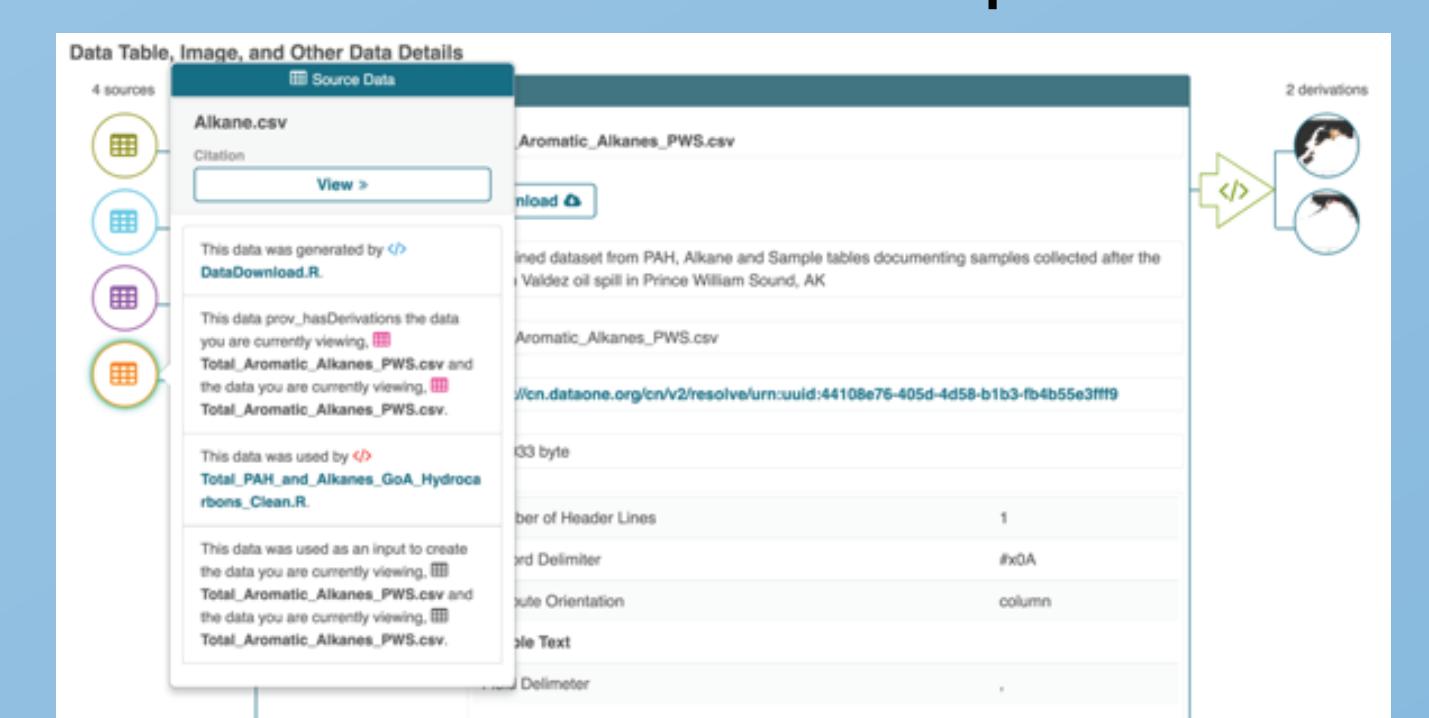
Training and Training Materials



Metadata Assessment Tool



Data Provenance Capture



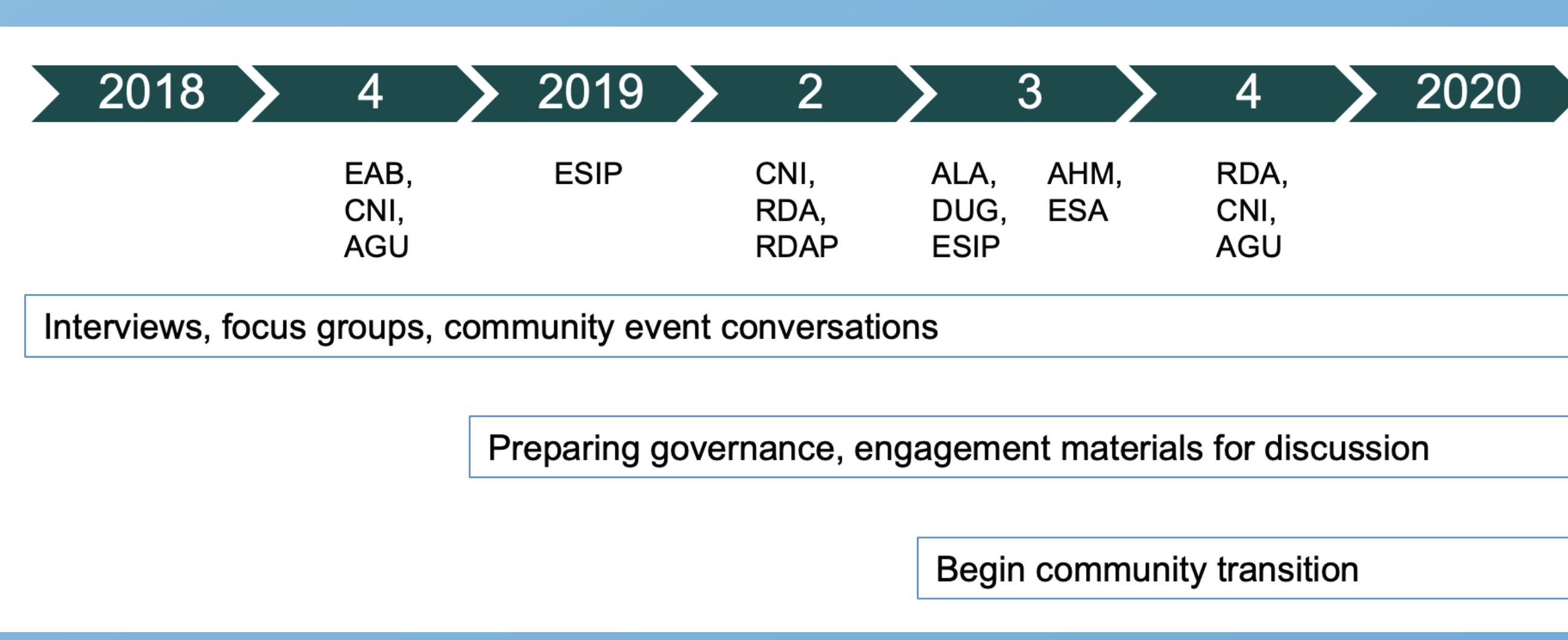
User Experience Evaluation



Transition Planning & Community Engagement

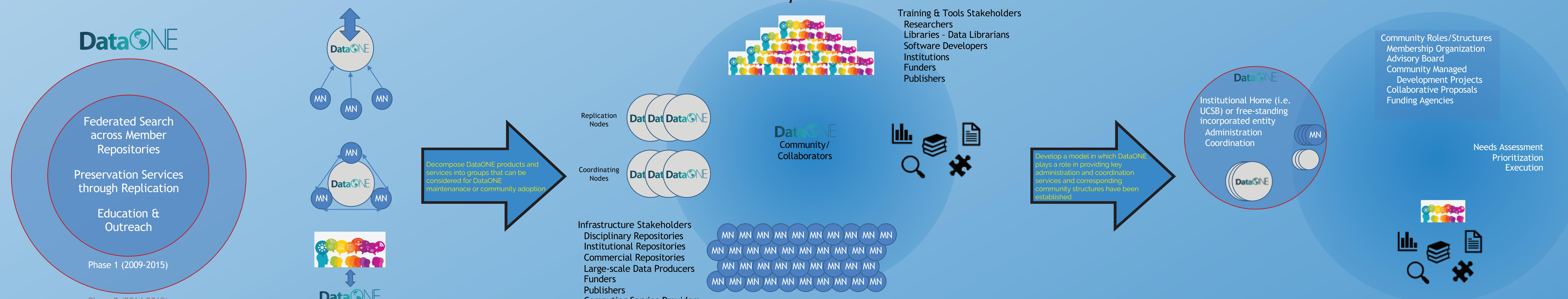
Community Cultivation Facets / ITAV Facets	Activities and Issues
Vision / not present	Mission, vision, values; strategic plan/ outcomes and impacts; SWOT; landscape and gap analyses; prioritization
Administrative Infrastructure / not present	Communications; CRM; member onboarding; evaluation of platforms and tools
Finances and HR / Resources	Funding and alignment with strategy; budget; pricing; HR; staff changes and professional development; building endowments
Engagement / Community Engagement	Foster relationships between community members; establish subgroups; regular meeting schedules; host events; community engagement awards; committee rules and processes; engage strategic affiliates; exercise the community's voice; surveys and interviews to reassess community needs
Governance / Governance	Document governance procedures; establish member MOUs/contracts; formalize leadership group; name and define roles and responsibilities; establish and grow community leadership; spin up / spin down committees and task forces; succession planning; maintain transparency
Not present / Technology	Understand community needs; onboard new developers and committers; engage the developer community; balance stability and integration with new development; transparent technology prioritization process; surveys and interviews to reassess community needs

Community engagement/leadership activities derived from Educopia *Community Cultivation* (2018), and Lyrasis *It Takes a Village* (2018) reports.



Community engagement timeline and outreach venues

The Conceptual Model



- References Cited:**
- 1 University of New Mexico - kbene@unm.edu
 - 2 University of Illinois at Chicago
 - 3 DataONE
 - 4 National Center for Ecological Analysis and Synthesis
 - Ap, L. G., Forbes, M., Cartolano, R. T., Cramer, T., Kimpton, M., Skinner, K., & White-side, A. B. (2018). *It Takes a Village: Open Source Software Sustainability*. <https://www.lyrasis.org/technology/Pages/IMLS-OSS.aspx>
 - Skinner, K. (2018). *Community cultivation: A field guide*. Atlanta: Educopia Institute Publications. <https://educopia.org/cultivation/>

Symbols in Diagrams



DataONE Infrastructure

Community Repositories

Other Community Hosted Infrastructure



DataONE or Community Developed & Maintained Software/Tool



DataONE or Community Developed & Maintained Training Materials