TRB Committee on Information and Knowledge Management (AJE45) Winter 2024 Committee Meeting AGENDA

1:30 – 3:00 PM (EDT)

Tuesday, April 30, 2024

Rosalyn Alleman (National Transportation Library), Matt Bagwell (Oregon DOT Statewide Research Coordinator), Walter Butcher (Crowe), John Cherney (Wisconsin DOT), Brianna Cochran (TxDOT/UT Austin), Amanda Collamore (TIDC at UMaine), Glenn Cole (Transportation Association of Canada), Rachel Cole (Northwestern University Transportation Library), Dan Cook (SCDOT), Craig Crick (Nevada DOT), Martrice Denson (SRTA State Road & Tollway Authority, Atlanta, GA), Michelle Duncan (Alaska DOT&PF), Lorri Economy (UDOT), Andy Everett (WSDOT), Frances Harrison (Spy Pond Partners), Amanda Holland (Holland Enterprise Resource Solutions), Anders Johnson (Montana DOT), Shubhangi Kelekar (Caltrans), Kendra Levine (UC Berkeley), Cara Marcus (National RTAP), Keith McCusker(Vermont AOT), Pat McVeigh (PennDOT), Michael Nugent (TxDOT Research Library, University of Texas at Austin), Erin O'Meara (Sound Transit). Leni Oman (Spy Pond Partners), Liz Osgood (TxDOT), Kiran Patel (NJDOT), Lori Richter (Spy Pond Partners), Randy Sarver (WisDOT), Dara Schniederjans (University of Rhode Island), Chris Senesi (HDR), Aliselina Strong (Montana DOT), Alyson Tamer (NCDOT), Shushanna Thompson (TRB), Travis Thompson (Kentucky Transportation Center), Mike Wendt (WSDOT), Garrett Wheat (LA DOTD), Rahel Yehdego (Sound Transit), Hong Yu (TTI)

1:30 -1:35	Welcome and Agenda Review	Thanks to everyone who participates and supports the work of this committee!
1:35 – 1:45	TRB Updates	 Introducing Shushanna Thompson - our new TRB Staff Liaison Proposed changes to paper review process – currently on pause for 2025 Annual Meeting – but accepted papers will need to provide a summary version. TRB Workforce conference in planning phase – May 2025 Next Triennial Strategic Plans due 2025 – seeking volunteers for subcommittee to develop draft before January 2025. (Rachel Cole, Amanda Holland, Amanda Collamore volunteered to help)
1:45 – 2:00	TRB 2025 Workshop	 Workshop proposals due to our section chair by May 3, final submittals by June 30th. Poll results (29 respondents): most popular options were "The Convergence of Data Governance, Knowledge Management and Information Management" (4 of 5) and "Breaking Down Silos: Building a Common Transportation Language" (3.8 of 5) – next step will be to craft a proposal that combines these two ideas & get a working group together. Chris Senesi, Leni Oman, Andy Everett, Matt Miller, Matrice Denson, Matt Bagwell volunteered to help Amanda Collamore suggests expanding the 508 compliance topic from researchers to training K-12 educators so that this becomes ingrained int the process of writing papers, reports, sharing scientific findings, etc.

2:15 - 2:30	IKM/CKM Collaborative Tools Inventory Update Quarterly Webinar Series	Amanda Holland demonstrated the tools inventory that resulted from the survey of CKM/IKM. BIG thanks to Amanda, John Cherney, Cara Marcus, Craig Crick and Lorri Economy for making this happen!! Additional materials are welcomed! Link is: https://sites.google.com/utah.gov/collaborative-tools-inventory/home Please send any additional tools to amanda@solutionsbyholland.com Suggestion: consider a TRB poster session to highlight these tools & publicize at the AASHTO Admin conference this fall. Erin O'Meara has agreed to lead a new IKM webinar series. The series is currently targeted to start in June, and will be held roughly mid-way between our regular IKM quarterly meetings. She has a starter list of topics, but is seeking additional ideas and speaker suggestions — contact Erin at: erin.omeara@soundtransit.org
		Ideas from the poll: controlled vocabularies and glossaries; building a business glossary; 508 accessibility, examples of KM deployments and implementations; Information policy, records management, and public users; sharing digital data for multigenerational researchers; capturing tacit knowledge information; tech platforms for KM, future of KM. Several people volunteered to help – names provided to Erin.
2:30 – 3:20	Controlled Vocabularies and Ontologies White Paper Brainstorming	Kendra led us in a conversation about the scope and objectives of an IKM white paper on controlled vocabularies and ontologies. We discussed the need for: clear objectives for the paper, use cases – multiple perspectives, considering an ethnographic approach, provide examples of language challenges trying to search RNS or RIP, referencing ISO standards and international models, explaining the various types of CVs in plain English with examples, outline major available taxonomies/ontologies and the strengths/weaknesses of each (including the TRT, which is necessarily "conservative". Consider making this a "State of the Art Report" using prior models from other TRB committees. See the "Words Matter" paper from WSDOT's PS AID project: https://www.wsdot.wa.gov/research/reports/fullreports/896-5 .
		pdf. Andy Everett (WSDOT) also has a 1-pager on Controlled Vocabularies.
3:20 – 3:30	News and Announcements	The National Transportation Knowledge Network is launching an Artificial Intelligence Community of Practice next month. The first meeting is May 15 at 3PM ET, led by Enid White from Wyoming DOT. Email rosalyn.alleman@dot.gov if you would like to get the invite, or check the NTKN calendar.

TRB Committee on Information and Knowledge Management – 2024 Updates & Resource Materials

1. Committee Status

- Our committee was officially approved by the TRB Technical Activities Council on June 30, 2020
- We are situated within the Executive Issues Section of the Policy and Organization Group
- Our official scope statement is:
 - o The TRB IKM committee is concerned with advancing and disseminating practices that improve knowledge and information creation, access, sharing, preservation and retention within and among transportation organizations. The committee identifies critical research needs in these areas, promotes understanding of these topics throughout the transportation community, and fosters the use of library and information science and knowledge management practices through education, training, collaboration, outreach and research.
- We have a Research Task Force that meets jointly with the AASHTO Committee on Knowledge Management's Research Subcommittee.
- We currently have 29 members and 350 friends.

2. Committee Meetings

- We hold quarterly committee meetings all committee members and friends are invited.
- To get on our committee email list, please sign up as a friend to committee AJE45 at: https://www.mytrb.org/Committees/SelfNominationAsFriend (We do not maintain a separate mailing list)

3. Committee Contacts

- Co-Chair Frances Harrison (fharrison <at> spypondpartners.com)
- Co-Chair Kendra Levine (kklevine <at> berkeley.edu)
- Co-Communications Coordinator Cara Marcus (cmarcus <at> nationalrtap.org)
- Co-Communications Coordinator Joseph Glowitz (josephglowitz <at> ps-e.com
- Research Coordinator Benjamin Anyacho (benjamin.anyacho <at> txdot.gov)
- AASHTO CKM Liaison Lorri Economy (leconomy <at>utah.gov)

4. Communications

- Our website is TRBIKM.ORG
- Please contact one of our communications coordinators with suggestions for new content and offers of assistance.

5. Committee Volunteer Opportunities

Our committee depends on strong engagement from members and friends to achieve our goals. Please contact one of the co-chairs if interested in helping:

- Organizing webinars
- Serving as a liaison between our committee and other TRB committees
- Helping with paper reviews, session planning and document review
- Helping us strengthen our diversity, equity and inclusion practices
- Drafting research needs statements
- Coordinating content curation for the committee website and the Knowledge Management LibGuide

6. Research

The TRB IKM Committee Research Task Force and the AASHTO Subcommittee on Knowledge and Information Management Research meet jointly every month to discuss and develop problem statements on topics of interest to our community. Please contact our research coordinator for further information on how to get involved.

Research Resources

- KM LibGuide: https://transportation.libguides.com/KM
- TRB's TRID: Home Transport Research International Documentation TRID (trb.org)
- TRB's Research in Progress: Home Research in Progress RiP (trb.org)
- TRB's Research Needs Statements: TRB Research Needs Statements
- USDOT Research Hub: Welcome to Research Hub (bts.gov)
- Research Funding Guide: http://www.trb.org/ResearchFunding/ResearchFunding.aspx
- https://nationalrtap.eos-intl.net/N94067/OPAC/Details/Record.aspx?BibCode=569509

CURRENT RESEARCH

Research Underway and In Development

Developed by the IKM Research Task Force

- NCHRP 23-14 Research Roadmap for Knowledge Management (Underway)
- NCHRP 23-17 Assessing and Measuring the Business Value of Knowledge Management (Underway)
 - This project folds in what was NCHRP 23-21-Enabling Knowledge Management through Leadership Strategy and Culture and NCHRP 23-18-Understanding Knowledge Management in Context with Other Organizational Practices
- NCHRP 20-24(141) Advancing the Art and Science of Decision Making (Underway)
- NCHRP 23-27 Strategies for Developing and Using Data Ontologies for Data-Driven Decision-Making (Underway)

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- NCHRP 23-30 Knowledge Strategies to support the Research Lifecycle and Application of Research Results (Underway)
- NCHRP 20-44(45) Supporting state DOT adoption of Knowledge Management practices (Underway)
- NCHRP 23-31 Strategies to Foster the Implementation of Knowledge Management (Underway)
- NCHRP 23-36 Development of a Knowledge Capture Toolkit for State DOTs (Underway)

Initiated by other committees/organizations but of potential interest to the IKM community

- TPF-5(442) Transportation Research and Connectivity (Underway) see Research Note for status
- NCHRP 20-44(40) Implementing the Agency Capability Building Framework to Activate Organizational Change
- NCHRP 20-102 (20) Workforce Capability Strategies for State and Local Agencies
- NCHRP 23-23 Data Governance Design and Implementation Links Between Governance Approaches and Performance Effects in DOTs
- <u>Tennessee DOT, Identifying Critical Knowledge Gaps</u> and Assessing Organizational Readiness for Improved Knowledge Management

COMPLETED RESEARCH

General KM

- ACRP 01-49 The Evolution of Knowledge Management at Airports (2023)
- <u>Tacit Knowledge Mode</u>l to Support Knowledge Capture and Transfer in GDOT
- NCHRP Project 20-123 (09) Feasibility Study for a Platform to Capture Innovations from State Departments of Transportation (2021)
- A Guide to Agency-Wide Knowledge Management for State DOTs. NCHRP Report 813 (2015)
- Advances in Transportation Agency Knowledge Management. NCHRP Project 20-68A, Scan 12-04 (Domestic scan)
 (2014)
- Chang-Albitres, C.M. and Krugler, P.E., 2005. A Summary of Knowledge Management Information Gathered from Literature, Web Sites, and State Departments of Transportation (No. 0-4505-P1). Texas Transportation Institute.
 (2005)

Knowledge Retention

- Keeping What You Paid For Retaining Essential Consultant-Developed Knowledge within State DOTs. NCHRP Report 867 (2017)
- Preserving and Using Institutional Memory Through Knowledge Management Practices. NCHRP Synthesis 365 (2007)

Workforce

- NCHRP 20-24(95) Ensuring Essential Capability for the Future Transportation Agency (portal) (2019)
- <u>TCRP Report 194: Knowledge Management Resource to Support Strategic Workforce Development for Transit Agencies</u>. (2018)
- Best Practices in Guidance for Workforce Transition and Succession Planning (includes WisDOT 'Guide For Knowledge 'Management) (2011)
- Closing the Knowledge Gap for Transit Vehicle Maintenance Employees--A Systems Approach. TCRP Report 29 (1998)

Data/Information

- NCHRP 20-24 (131) Mapping the Common Interests of AASHTO Committees (2023) links to final deliverables on the NCHRP project page.
- Guidelines on Collaboration and Information Security for State DOTs, NCHRP Report 1034 (2023)
- A Guide to Ensure Access to the Results of Federally Funded Transportation Research, NCHRP Report 936. (2020)
- NCHRP 20-44(11) Advancing practices for data governance, information management, and managing the impact of digitization on DOT workforces (2020)
- Guidance for Development and Management of Sustainable Information Portals, NCHRP Report 865. (2018)
- The Transportation Research Thesaurus: Capabilities and Enhancements. NCHRP Report 874 (2018)
- Improving Findability and Relevance of Transportation Information. NCHRP Report 846 (2017)
- Data Management and Governance Practices. NCHRP Synthesis 508 (2017)
- Improving Management of Transportation Information. NCHRP Report 754. (2013)
- Implementing Transportation Knowledge Networks. NCHRP Report 643 (2009)
- Transportation Knowledge Networks, A Management Strategy for the 21st Century. TRB Special Report 284 (2006)