

TRB Committee on Information and Knowledge Management (AJE45)**Summer Committee Meeting****NOTES****12 PM –1:30 PM (EDT)****Tuesday, June 27, 2023**

47 Attendees: Amy Abadilla-WSDOT, Rosalyn Alleman-National Transportation Library, Carter Angelo-WisDOT, Sandy Brady - Louisiana Transportation Research Center (unit of LaDOTD and LSU), Hannah Brown-Wisconsin DOT, John Cherney-Wisconsin Department of Transportation, Barbara Chomicka-Turner & Townsend, Brianna Cochran- TxDot Research Library, Glenn Cole-Transportation Association of Canada, Craig Crick - Nevada DOT, Martrice Denson- State Road & Tollway Authority, SRTA, Michelle Duncan - Alaska DOT&PF, Andy Everett – WSDOT, Moses Garcia-TXDOT, Joseph Glowitz, PE, PMP. PS-E, LLC, Frances Harrison-Spy Pond Partners, Makram Bou Hatoum-University of Kentucky, Amanda Holland-Holland Enterprise Resource Solutions LLC, Kyle Innes-Georgetown University, Ryan Hollman, David Jared-TRB/NCHRP, Kendra K Levine-UC Berkeley ITS, Aaron Johnson-Michigan DOT, Shubhangi Kelekar - California Dept. of Transportation, Catherine Keathley – Kentucky Transportation Cabinet, Cara Marcus-National RTAP, April Meadows-Oklahoma DOT, Matt Miller-TTI, Jim Nihan-Transit AMS, Hilary Nixon-Mineta Transportation Institute, San Jose State University, Michael Nugent-TxDOT Research Library, Leni Oman-WSDOT, Erin O'Meara, Sound Transit, Michael Pipp-MT DOT, Pawel Polaczyk-Tennessee DOT, Geoffrey Potter-TxDOT Research Library, University of Texas at Austin, Shelly Ray-LA Metro, Jordan Rock-Tennessee Department of Transportation, Jeff Rockower-NJDOT, Dara Schniederjans-University of Rhode Island, Cindy Smith-Mississippi DOT, Terry Swygert-SCDOT, Alyson Tamer-NCDOT, Paul Tykodi-MassDOT, Marilee Tuite-Center for Transportation Studies (University of Minnesota), Jade Watford-SCDOT, Enid White-WYDOT, Hong Yu-TTI

12:00 –12:05	Welcome and Agenda Review	Thanks to everyone who participates and supports the work of this committee!
12:05 – 12:15	Update on Workshops for TRB 2024	We are co-sponsoring 3 workshops (see below) We are seeking volunteers to serve as committee liaisons for 2 of these. (Frances Harrison)
12:15 – 12:20	Committee Webinars	Volunteers: Matrice D, April M, Aaron J Other Ideas: tips for researchers on use of LLMs (Enid White) - possible speakers are Drew Zhang from URI, professor from U Penn (Jeff R to check), ID relevant speakers from TRB, Elsevier, Sage (publisher of TRRs). As part of same webinar or separate one, Andy E can do a presentations on “Ontologies 101”
12:20 – 12:30	Research Update	NCHRP 23-27 (Ontologies) is under contract and has started. NCHRP 23-30 and -31 have been awarded and are pending contract execution. Panel nominations are still being accepted for 23-36, through June 30. See David Jared for info on nomination process.
12:30-12:35	Communications Update	Let Cara Marcus know if you have any suggestions for content additions to our website. Take advantage of our Linkedin group to network with this community and initiate conversations on topics of interest.
12:35– 12:45	AASHTO CKM Update	Registration is open for the AASHTO Admin Conference, July 17-20, Long Beach, CA. CKM breakout sessions led by Paula Nash

		(NHDOT), Carin Michel (FHWA), David Jared (TRB/NCHRP), Christine McDonald (FDOT) + more. All are welcome to join CKM research subcommittee meetings, 4th Tues. of the month - contact Craig Crick for more info Matt Miller is working on a new survey to look at perception of past research products.
12:45 – 1:05	Featured Speaker	Dr. Hillary Nixon, Deputy Executive Director of the Mineta Transportation Institute “A University Transportation Center’s Approach to Knowledge Transfer”(see posted presentation)
1:05 – 1:20	TRB 2024 Planning	Call for Papers – due Aug 1st Session Ideas (we can sponsor 2 sessions) - Ontologies, AI/IKM intersection, Info Architecture and findability, learning culture, visual presentation of information - replacement of text with icons or pictures (possible paper from Barbara C.) Amanda H and Leni O volunteered to help organize sessions Keep the ideas coming: email the co-chairs (see Committee Contact info below for emails)
1:20 – 1:30	Member/Friend News	Amanda H: The AASHTO Subcommittee on Transportation Workforce Management recently held a webinar and delivered a playbook that incorporates KM into workforce management. Here is a link to the recording of the webinar and the playbook: https://transportation.org/agency-admin/resources/ Amanda is also seeking KM vignettes for the playbook - contact her if you have ideas to contribute (amanda@solutionsbyholland.com)

AJE45 Co-Sponsored TRB Workshops 2024

The Future of the Transportation Workforce Development Life-cycle (AJE15-Workforce Development and Organizational Excellence)

Participants will engage in robust discussion concerning transportation's future workforce development life-cycle. Challenges presented by thought leaders will enable strategic planning on key impacts for the future workforce, it's development, and how SDOTs respond. The impact of AI with the current knowledge base, the innovation life-cycle including research, both home-grown and national improvements, will seed the conversation. Proceedings will inform the 2025 TRB WFD Natl Conf planning.

AJE45 Liaison: TBD (Amanda will cover this one if nobody else is interested)

Designing the Transportation Agency of the Future (AJE 10-Strategic Management)

How must transportation agencies evolve to meet changing customer needs? How can they leverage technology and innovation? Will the future DOT focus on system management, mobility, or strategic development? How can DOTs work with other public and private partners to carry out this mission? Join an interactive discussion on designing the agency of the future, building on recent research by TRB and PIARC and the vision framework adopted by AASHTO. This workshop will follow up on a planned October 2022 workshop at the World Road Congress convened by PIARC in partnership with TRB, AASHTO, ITRA, and other partners.

AJE45 Liaison: Amanda Holland

Open Innovation: Public Sector Engagement with the Private Sector to Advance Innovation (AJE35- Research Innovation Implementation Management)

Conversations around innovation at state DOTs often focus on internally-driven innovation. But what about cases where the private sector, particularly start-ups, have ideas they'd like to see transportation agencies advancing? Open Innovation is an approach to sharing and exchanging knowledge with external partners to accelerate internal innovation. The workshop will define Open Innovation and present national and international examples of Open Innovation approaches, such as co-creation.

AJE45 Liaison: TBD

TRB Committee on Information and Knowledge Management – 2023 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:
 - *The 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 25 [members](#) and 289 [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)

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>

CURRENT RESEARCH

Research Underway and In Development (* indicates change from last quarter)

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\(141\)](#) The Art of Decision Making (Underway)*
- [NCHRP 23-27](#) Strategies for Developing and Using Data Ontologies for Data-Driven Decision-Making
- [NCHRP 20-44\(45\)](#) Supporting state DOT adoption of Knowledge Management practices (Pending)
- [NCHRP 23-30](#) Knowledge Strategies to support the Research Lifecycle and Application of Research Results
- [NCHRP 23-31](#) Strategies to Foster the Implementation of Knowledge Management
- [NCHRP 23-36](#) Development of a Knowledge Capture Toolkit for State DOTs (In Development for FY24)*

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

- [TPF-5\(442\)](#) Transportation Research and Connectivity (Underway) – see [Research Note](#) for status
- [NCHRP 20-102 \(20\)](#) Workforce Capability Strategies for State and Local Agencies (Pending)
- Using Knowledge Graph technology to improve online search capabilities (funded through NCHRP administrative/IT budget)

COMPLETED RESEARCH

General KM

- [ACRP 01-49](#) The Evolution of Knowledge Management at Airports (2023) – in publication process
- [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)
- [Ward, M., 2007. Preserving and Using Institutional Memory Through Knowledge Management Practices \(No. Project 20-5 \(Topic 37-02\)\). NCHRP Synthesis of Highway Practice Issue Number: 365](#) (2016)

Workforce

- [TCRP Report 194: Knowledge Management Resource to Support Strategic Workforce Development for Transit Agencies.](#) (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)
- [NCHRP 20-24\(95\) Ensuring Essential Capability for the Future Transportation Agency](#) ([portal](#))

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)