TRB Committee on Information and Knowledge Management (AJE45) Summer Committee Meeting MINUTES 1 PM -2:30 PM (EDT) Monday, July 18, 2022

Attendees: Benjamin Anyacho, Texas DOT; Kelly Brothers, Indiana DOT; Rachel Catchings, University of Kentucky; Sandy Brady, Louisiana Transportation Research Center: Omar Camacho - Los Angeles County Metropolitan Transportation Authority (LACMTA) - LA Metro; John Cherney, Wisconsin DOT; Amanda Collamore - TIDC @ the University of Maine; Glenn Cole, Transportation Association of Canada (TAC); Rachel Cole, Northwestern University Transportation Library; Katie Crabb, District Department of Transportation; Michelle Drabik, JPL (Guest); Lorri Economy, Utah DOT Maurice Elliott, Florida DOT; Jamie Fischer, Georgia's state mobility authorities (SRTA, GRTA, ATL); Clare Fullerton, GeoDecisions; Amanda Gilman-Bogie, State of Vermont, Agency of Transportation (VTrans), Performance Team, Manager of the CI Unit; Leia Golden, TxDOT; Frances Harrison, Spy Pond Partners; Jennifer Herron, MDOT; Meredith Hill, Maryland DOT; Elizabeth Hoffman – FHWA; Amanda Holland, Holland Enterprise Consulting; Charles Holloway, Washington State DOT; Katelyn Kasberg, TxDOT; Rafay Khan, Moove, AI; John Kirby, NC DOT; Paraniyoti Lahkar, Weris Inc; Kendra K. Levine, Institute of Transportation Studies, UC Berkeley; Ian Machen - Ludian Intelligent Mobility Consultancy; Matt Miller, TTI; Cara Marcus, National RTAP; Mary Moulton, National Transportation Library; Michael Nugent, TxDOT Research Library, Austin, TX; Jenny Phan- Kennesaw State University; Dara Schniederjans, University of Rhode Island; Keyur Shah, HDR Inc.; Chris Senesi, HDR; Paul Tykodi, Massachusetts Department of Transportation; Jessica VanDenBogaert – FDOT; Dr Harsh Verma, Principal Consultant, Glocol Networks; Eliza Vermillion, Lamara Williams-Jones, Research Librarian, North Carolina Department of Transportation; AmaTerra Environmental; Hong Yu, TTI; David Apolinar Guerra Zubiaga - Kennesaw State University;

1:00 -1:05	Welcome and Agenda Review (Kendra Levine)	Thanks to everyone who participates and supports the work of this committee!			
1:05 – 1:15	Subcommittee Updates	Research (Benjamin Anyacho) See summary of research activities below Craig Crick – Nevada DOT is the new AASHTO CKM Research Subcommittee Chair All are welcome to attend the research subcommittee meetings – 4 th Thursday of every month – our committee collaborates with AASHTO CKM on identifying and advancing research problem statements. Send ideas to Benjamin (contact info below) Communications (Jessica VanDenBogaert/Cara Marcus) Join our LinkedIn Group – intended to provide a way for our committee to communicate and have threaded discussions: https://www.linkedin.com/groups/4324141/ We are always looking for new IKM-related content to post on our website – send ideas and links to Cara (contact info below)			
1:15 – 1:25	AASHTO CKM Update (Lorri Economy)	AASHTO CKM's website has many valuable KM-related resources – see: https://km.transportation.org/			

		 Aaron Johnson (Michigan DOT) has replaced Leni Oman (who retired at the end of June) as the vice chair of AASHTO CKM. AASHTO CKM is meeting with the other AASHTO Administration committees in Charleston, SC on August 22-25th. The committee meeting (Thursday, 8:30 AM Eastern) will likely have a remote option. On Tuesday, a speaker from APQC will present on "embedding KM into the way we work." See draft agenda.
1:25 – 1:55	Invited Speaker	Michelle Drabik, NASA JPL – "Day in the Life of a Chief Knowledge Officer" – see slides posted on our committee's website. Some takeaways: JPL has a culture of innovation and learning – no need to sell KM, "they have already bought it" As the KM lead, don't try to own everything; focus on facilitating and making it easy to do and making it all work together Pandemic impacts: recognize the old culture and way of collaborating is gone – this is an opportunity to reinvent how we do things, make it better. Making more use of slack and other collaboration tools. We should be capturing knowledge throughout employees' careers – not waiting until they announce their retirement. But we have guidelines for how to capture the unique things people know before they depart. Provide flexibility in knowledge capture. Getting rid of ROT – have curation staff who integrate reminding people to remove un-needed content into their work of making information findable. Ensuring findability of project-related content after projects are completed is a challenge. JPL has started to tackle this by making project folders discoverable via their enterprise search tool.
1:55-2:15	2023 TRB Meeting Planning (Frances Harrison/Kendra Levine)	 Committee-sponsored workshop: "You Have the Data, Do You Have a Staff Capable of Using It?: Transforming the Transportation Agency Workforce" – Sunday, January 8th 1:30-4:30 PM Panel session on integrating IKM activities across agency functions = planning in progress. Let Kendra or Frances know if you have suggestions for

		panelists who have integrated/collaborative approaches across data, KM, library, HR, OD functions. • 2 nd podium session TBD – ideas welcome • Poster session TBD – poster proposals welcome • TRB papers due August 1 st – consider submitting a paper on an information/KM topic!
		Session ideas: Demonstration(s) of successful integration of KM into a specific field or discipline (e.g., road crews, preconstruction, etc.) Cognitive computing, intersection of KM and AI/ML – using ML to create new knowledge/insights from existing knowledge bases
2:15 – 2:30	Member/Friend News	Opportunity for participants to share what is happening in their organizations or make announcements that are of interest to this Committee: • Amanda Holland is supporting the new AASHTO subcommittee on workforce management and will be creating an online repository of workforce-related information, including a section on KM. If you have content or links to suggest, let Lorri Economy know. (contact info below) • Harsh Varma suggested that our committee members and friends might be interested in a webinar on "Transit Data Therapy" – 7/20 1 PM Eastern see info here.

TRB Committee on Information and Knowledge Management – 2022 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 28 members and 208 friends.

2. Committee Meetings

- We are planning quarterly committee meetings in 2022 all committee members and friends are invited.
- Our next meeting is October 19, 2022 from 1-2:30 PM Eastern
- If you have suggested agenda items, please email them to the committee co-chairs.

3. Committee Contacts

- Co-Chair Frances Harrison (fharrison <at> spypondpartners.com)
- Co-Chair Kendra Levine (kklevine <at> berkeley.edu)
- AASHTO Committee on Knowledge Management Liaison Lorri Economy (leconomy <at> utah.gov)
- Co-Communications Coordinator Jessica VanDenBogaert (jessica.vandenbogaert <at> dot.state.fl.us)
- Co-Communications Coordinator Cara Marcus (cmarcus <at> nationalrtap.org)
- Research Coordinator Benjamin Anyacho (benjamin.anyacho <at> txdot.gov)

4. Communications

- Our website is www.TRBIKM.ORG
- Our linkedin group is https://www.linkedin.com/groups/4324141/
- 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: <u>Home Transport Research International Documentation TRID (trb.org)</u>
- TRB's Research in Progress: Home Research in Progress RiP (trb.org)
- TRB's Research Needs Statements: <u>TRB Research Needs Statements</u>
- 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

Developed by the IKM Research Task Force

- NCHRP 23-02 Guidelines on Collaboration and Information Security for State DOTs (Underway)
- NCHRP 20-24 (131) Mapping the Common Interests of AASHTO Committees (Underway)
- NCHRP 23-14 Research Roadmap for Knowledge Management (Underway)
- NCHRP 23-17 Assessing and Measuring the Business Value of Knowledge Management (Pending)
 - 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 23-27 Strategies to Strengthen Data-Driven Decision Making (Anticipated)
- NCHRP 20-24(141) The Art of Decision Making (Anticipated)
- A-05 Knowledge Strategies to support the Research Lifecycle and Application of Research Results (tentatively selected for FY 2023)
- A-06 Lessons learned from two decades of knowledge management (tentatively selected for FY 2023)

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

- NCHRP 2-44(09) Quantitative and Qualitative Methods for Capturing the Impacts and Value of NCHRP Research (Underway)
- TPF-5(442) Transportation Research and Connectivity (Underway)
- 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

- Advances in Transportation Agency Knowledge Management. NCHRP Project 20-68A, Scan 12-04 (Domestic scan)
 (2014)
- A Guide to Agency-Wide Knowledge Management for State DOTs. NCHRP Report 813 (2015)
- 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)
- Feasibility Study for a Platform to Capture Innovations from State Departments of Transportation, NCHRP Project 20-123 (09) (2021)

Knowledge Retention

- Keeping What You Paid For Retaining Essential Consultant-Developed Knowledge within State DOTs. NCHRP Report 867 (2018)
- Preserving and Using Institutional Memory Through Knowledge Management. NCHRP Synthesis 365 (2016)
- 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

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

Data/Information

- Implementing Transportation Knowledge Networks. NCHRP Report 643 (2016)
- Improving Findability and Relevance of Transportation Information. NCHRP Report 846 (2017)
- Transportation Knowledge Networks, A Management Strategy for the 21st Century. TRB Special Report 284
 (2014)
- <u>Data Management and Governance Practices. NCHRP Synthesis 508</u> (2017)
- Guidance for Development and Management of Sustainable Information Portals, NCHRP Report 865. (2018)
- A Guide to Ensure Access to the Results of Federally Funded Transportation Research, NCHRP Report 936. (2020)
- The Transportation Research Thesaurus: Capabilities and Enhancements. NCHRP Report 874 (2018)
- Improving Management of Transportation Information. NCHRP Report 754. (2016)

• NCHRP 20-44(11) Advancing practices for data governance, information management, and managing the impact

of digitization on DOT workforces